A STUDY TO EVALUATE THE EFFECTIVENESS OF GUIDED IMAGERY ON PAIN AMONG PATIENTS WHO UNDERWENT ABDOMINAL SURGERIES IN A SELECTED HOSPITAL, AT COIMBATORE.

BY

Reg. No: 301412852

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CERTIFICATE

Certified that this is the bonafide work of Miss. Susan petricia.B. final year M.Sc(Nursing)student of Kongunadu College of Nursing, Coimbatore, submitted in partial fulfilment of the requirement for the Degree of Master of Science in Nursing affiliated by The Tamil Nadu Dr.M.G.R. Medical University, Chennai.

College Seal:

Signature of the Principal: …….

Prof. Mrs. K. PAPPATHI, M.Sc (N),

Principal,

Kongunadu College of Nursing,

Coimbatore.

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Approved by the Dissertation Committee On:

Signature of the Research Guide: ……..…….

Mrs. Sahaya Mary. M.sc (N)
Professor and HOD,
Department of Obstetrical and Gynaecology Nursing,
Kongunadu College of Nursing,
Coimbatore.

Signature of the Clinical Specialty Guide: ……....

Mrs.Gokilamani. Ph.D
Professor and HOD,
Department of Medical Surgical Nursing,
Kongunadu College of Nursing,
Coimbatore.

Signature of the Medical Expert: **……**

Dr.R.Kartikeyan. M.B.B.S., Ms.,(General surgery)
Consultant Surgeon/Medical Director
Kongunadu Hospital, Pvt.,Ltd.
Coimbatore.

Signature of the Internal with date **Signature of the External with date**

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I dedicate this Dissertation to my

lovable family members

Mr.D.Basker Dass,

Mrs.Sulochana.J, Mr.B.Subash,

Miss R.Sangeetha, Mrs.Nisha,

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ABSTRACT

A study was conducted to evaluate the effectiveness of guided imagery on pain among patients who underwent abdominal surgeries in Kongunad hospitals, Coimbatore. A quantitative evaluative approach with quasi experimental pre test, post-test control group design was used. Non-Probability purposive sampling technique was used to select the samples.60 samples were selected, among them 30 samples from first floor were assigned to experimental group and 30 samples from second floor were assigned to control group. The conceptual frame work selected for this study was based on modified Ludwig Von Bertanlanffy general system theory. Demographic variables were collected by using a Structured Interview schedule. In experimental group, investigator used guided imagery and assessed the level of pain by using numerical pain intensity rating scale. In control group investigator assess the level of pain without any intervention. The data gathered were analysed by descriptive and inferential statistical method. Paired't' test value which was calculated to analyse the effectiveness of guided imagery on patients who underwent abdominal surgeries to reduce the level of pain among experimental group. The calculated paired't' value Day -I was 4.5. Day -II was 4.4. Day -III was 7.7 significantly greater than the table value 1.69 at $p \leq 0.05$. Hence the hypothesis H_1 is accepted. It is evident that guided imagery was effective in reducing pain among patients who underwent abdominal surgeries in experimental group. The independent't' test value in experimental group Day-I mean score was 4.7 with standard deviation of 2.7. In control group Day –I mean score was 6.6 with standard deviation of 2.2 independent't' test value was 6.8. Day II experimental group mean score was 3.2 with standard deviation of 2.5 in control group mean score was 4.9 with standard deviation of 2.1, and the independent't' test value was 6.1.Day-III experimental group mean score was 1.8 with standard deviation of 1.5 in control group mean score was 2.9 with standard deviation of 1.5, and the independent 't' test value was 5.1 is greater than the table value of 1.69 at the level of $p \leq 0.05$.Hence guided imagery is effective method to reducing level of pain among patients who underwent abdominal surgeries.

CHAPTER-I

INTRODUCTION

“Imagination is only intelligence having fun”

Albert Einstein

The abdomen commonly called the belly is the body space between the thorax (chest) and pelvis. The diaphragm forms the upper surface of the abdomen. At the level of the pelvic bones, the abdomen ends and the pelvis begin.

The abdomen contains all the digestive organs including the stomach, small and large intestines, pancreas, liver and gallbladder. These organs are held together loosely by connecting tissues (mesentery) that allow them to expand and to slide against each other. The abdomen also contains the kidneys and spleen.

Many important blood vessels travel through the abdomen, including the aorta, inferior vena cava, and dozens of their smaller branches. In the front, the abdomen is protected by a thin and tough layer of tissue called fascia. In front of the fascia are the abdominal muscles and skin. In the rear of the abdomen are the back muscles and spine.

The abdomen can be injured in many ways. The abdomen alone may be injured or injuries elsewhere in the body may also occur. Injuries can be relatively mild or very severe. Doctors often classify abdominal injuries by the type of structure that is damaged and how the injury occurred. The type of structures includes the abdominal wall, solid organs (i.e., the liver, spleen, pancreas and kidneys) and hollow organs (i.e., the stomach, small intestine, colon, ureters and bladder).Abdominal injuries may also cause problems later on which include injuries due to intestinal obstruction. The term abdominal surgery broadly covers surgical procedures that involve opening the abdomen. Surgery of each abdominal organ is dealt with separately in connection with the description of that organ such as stomach, kidney, liver etc. Diseases affecting the abdominal cavity are dealt with generally under their own names e.g. appendicitis.

The most common abdominal surgeries are appendectomy, hysterectomy, laparotomy, inguinal hernia surgery, exploratory laparotomy, laparoscopy and cholecystectomy. Among the abdominal surgeries performed generally about 10% to 20% is cholecystectomy, about 10% is inguinal hernioplasty, about 45% is appendectomy and about 65% is hysterectomy.

The word pain is derived from the Latin word 'poena' which means punishment, which in turn derived from the Sanskrit root 'pu' meaning purification. The international association for the study of pain defines, "pain is an unpleasant sensory and emotional experience associated with actual or potential tissue damage". The international association for the study of pain further states that, "Pain is subjective. Each individual learns the application of the word through experiences related to him/her in early life." This definition emphasizes the individuality of each person's pain response and the importance of pain experiences, especially those in early life, in shaping that response. Thus, the experience of a child during painful medical procedures likely plays a significant role in shaping that individuals pain response to future events.

Pain is a complex, multidimensional experience. Pain is one of the major reasons that people seek health care. A thorough understanding of the physiologic and psychosocial dimensions of the pain is important for effective assessment and management of patient with pain.

Despite national and international efforts, guidelines, standards of practice, position statements and many important discoveries in the field of pain management in the past 3 decades pain remains a major stressor for patients in critical care setting such as acute illness, surgery, trauma, invasive procedure, nursing and medical interventions. It is not surprising that more than 50% of the critically ill patients experience moderate to severe pain.

Pain is the fifth vital sign. Including pain assessment with other routinely documented vital signs may help to ensure that pain is assessed and controlled in all patients on a regular basis. This approach can ensure that the pain is detected and treatment implemented before the patient develop complications associated with unrelieved pain.

The prevalence of chronic pain is estimated at 8-60% of population, Sever pain is estimated at 11% for adult and 8% for children. The average annual incident is 8.3% and average annual recovery rate is 5.4%.

The nurses identify many barriers to the use of non-pharmacological methods for pain management including knowledge, training and time. Despite these problems more than 60% of them are willing to use this method to relieve the pain of their patients.

Using the cortical interpretation of pain as the foundation, several interventions can reduce the patient's pain report. These modalities include cognitive techniques, patient teaching, relaxation, distraction, guided imagery, music therapy and hypnosis.

American Pain Society and Joint Commission on Accreditation of Healthcare Organizations (JCAHO) says that 80% of patients experience acute pain after surgery and post-operative pain is a common concern among patients, for incidence an open cholecystectomy has a 19% incidence of pain for 6 months, and a laparoscopic cholecystectomy has a 9% incidence of pain for 6 months.

Guided imagery is a gentle but powerful technique that focuses and directs the imagination. It has been called "visualization" and "mental imagery". Guided imagery involves more than just the visual sense and this is a good thing, given the fact that only about 55% of the population is strongly wired visually. Instead, imagery involves all of the senses and almost anyone can do this. It is strictly not a "mental" activity alone. It involves the whole body and the emotions involving all the senses. It is precisely this body based focus that leads to its powerful impact.

Because it is a right brained activity, engaging in it will often be accompanied by other functions that reside in that vicinity such as emotion, laughter, sensitivity to music, openness to spirituality, intuition, abstract thinking and empathy.

As it mobilizes unconscious and pre-conscious processes to assist with conscious goals, it can bring to bear much more of a person's strength and motivation to accomplish a desired end. So, subtle and gentle as this technique is, it can be very powerful, and more and more so over time.

One of the most appealing features about imagery is that almost anyone can use it. Although children and women probably have a slight, natural advantage, imagery skips across the barriers of education, class, race, gender and age. It is truly equal opportunity intervention.

3 Principle of Guided imagery

Guided imagery works because of three very simple and common sense principles.

First Principle: The Body Connection -First of all, to the body, images created in the mind can be almost as real as actual and external events.

Second Principle: The Altered State-Secondly, in the altered state, we are capable of more rapid and intense healing, growth, learning and performance.

Third principle: Locus of Control -When we have a sense of being in control, in and of itself, that can help us to feel better and do better.

Feeling in control is associated with higher optimism, self-esteem, and ability to tolerate pain, ambiguity and stress. Decades of research in ego psychology informs us that we feel better about ourselves and perform better when we have a sense of mastery over the environment. Conversely, a sense of helplessness lowers self-esteem, our ability to copepod our optimism about the future.

Because guided imagery is an entirely internally driven activity and the user can decide when, where, how and if it is applied, it has the salutary effect of helping us feel as if we have some control.

Hence a technique that generates an altered state in which the mind is directed toward multi-sensory images that the body perceives as real. This is done exactly when, where and how the user wishes and that's why it's so effective.

Imagery works best in a permissive, relaxed, unforced atmosphere. So try not to get too intense about "doing it right". There are many ways to do it right.

Music, when properly chosen, will increase the effects of imagery you will intuitively know what music is right for what you need. A small percentage of people prefer no music at all.

Imagery that elicits emotion is generally more effective than imagery that doesn't. Responding with emotion is a good sign that the imagery is working for you in a deep way.

If using self-talk with your imagery, try to avoid the imperative verb form on yourself, so that inadvertently "bossy" language doesn't get your back up and marshal unnecessary resistance.

If used to being both relaxed and awake at the same time, you will routinely fall asleep during an imagery session, especially if you're listening to tape. If you want to stay awake, you might try sitting up, standing, walking or listening with your eyes half open.

Imagery & Intuition

- Guided imagery is one near perfect vehicle for replicating both the biophysical and the subjective conditions that configure to produce a "psychic pop" of sixth sense knowing.
- Guided imagery that opens the heart and deliberately evokes feelings of love, gratitude and compassion, is a particularly safe and powerful way

NEED FOR THE STUDY

The abdomen is formally called the belly, stomach, tummy or midriff constitutes the part of the body between the thorax(chest) and pelvis, in humans and in other vertebrates. The region enclosed by the abdomen is termed the abdominal cavity. The abdomen stretches from the thorax at the thoracic diaphragm to the pelvis at the pelvic brim. The space above this inlet and under the thoracic diaphragm is termed the abdominal cavity. The boundary of the abdominal cavity is the abdominal wall in the front and the peritoneal surface at the rear.

Surgery generally involves an incision through the skin and under lying tissues. Post-operative pain is a form of acute pain which results from tissue injury during surgical procedure like skin incision and tissue dissection. Globally the prevalence of post-operative pain ranges from 50% to 75% of post-operative patients. A recent study has reported that 30% of post-operative patients experience pain post-surgery.

Post-operative pain is important for identifying so that, the health care professionals can improve post-operative care. To assess the experience of a patient's post-operative pain and the state of acute pain management, a national level study has been conducted by using telephone questionnaires. A random sample of 250 adults who had undergone surgical procedure recently in USwas obtained. The survey was

about their post-operative pain experience. Approximately 80% of patients experienced pain after surgery, 86% had moderate, severe or extreme pain. Additional efforts are required to improve the post-operative pain experience of patients.

More than 73 million surgeries are performed in each year, causing a great deal of pain. Nearly 50% of post-operative patients have moderate pain and more than one third suffer severe pain on abdominal surgery.

The management of post-operative pain in elderly orthopaedic patients is critical for advancing patient outcomes and improving the use of health care resources. Adequate pain control without adverse side effects such as sedation is crucial to promote comfort and participation in rehabilitation therapies among patients and in particular among elderly joint replacement patients. Without adequate pain control, physiotherapy is delayed and the risk of complication increases. One area of investigation that holds promise for improved treatment out comes, involves the use of complementary therapies, such as guided imagery.

Trends in this pilot study demonstrated positive outcomes for pain relief and decreased length of stay. Complementary therapy holds the promise of increasing positive outcomes.

Robert (2008) conducted aquasi-experimental study to measure the prevalence of post-operative pain and assessment was made of 1490 surgical in-patients who were receiving post-operative pain treatment according to an acute pain protocol. Measurements of pain (scores from 0 to 100 on a visual analogue scale) were obtained three times a day on the day before surgery and on days 0–4 post-operatively and mean pain intensity scores were calculated. Moderate or severe pain was reported by 41% of the patients on day 0, 30% on days 1 and 19%, 16% and 14% on days 2, 3 and 4. The prevalence of moderate or severe pain in the abdominal surgery group was high on postoperative days 0–1 (30–55%). A high prevalence of moderate or severe pain was found during the whole of days 1-4 in the extremity surgery group (20–71%) and in the back/spinal surgery group (30–64%). Researchers concluded that despite an acute pain protocol, post-operative pain treatment was unsatisfactory, especially after intermediate and major surgical procedures on an extremity or on the spine.

Effective post-operative pain control is an essential component of the care of the surgical patient. Inadequate pain control, apart from being inhumane, may result in increased morbidity or mortality. The advantages of effective post-operative pain management include patient comfort and therefore satisfaction, earlier mobilization, fewer pulmonary and cardiac complications, a reduced risk of deep vein thrombosis, faster recovery with less likelihood of the development of neuropathic pain and reduced cost of care. The goal of postoperative pain management is to relieve pain while keeping side effects to a minimum.

Mefic (2009) conducted a national level study in UK to assess the patients post-operative pain experience and the status of acute pain management with random sample of 250 adults who had undergone surgical procedures by using the telephone questionnaires. Results showed that approximately 80% of patients experienced acute pain after surgery. Of these patients, 86% had moderate, severe, or extreme pain, with more patients experiencing pain after discharge than before discharge. Experiencing post-operative pain was the most common concern (59%) of patients. Almost 25% of patients who received pain medications experienced adverse effects. Despite an increased focus on pain management programs and the development of new standards for pain management, many patients continue to experience intensive pain after surgery.

Halpinet al., (2009)performed a study to assess the prevalence and course of postoperative pain in the early postoperative period after ambulatory surgery and 648 patients who underwent day-case surgery were included in the study. Data were collected with interviews and questionnaires and pain intensity was measured using a visual analogue scale (VAS) during the first 4 days after surgery. Results showed the ton the day of operation, 26% of the patients had moderate to severe pain (defined as mean VAS >40 mm). Mean VAS-scores were greater than 40 mm in 21% on post-operative day (POD) 1, in 13% on POD 2, in 10% on POD 3, and in 9% on POD 4. Operations of nose and pharynx, abdominal operations, plastic surgery of the breasts, and orthopaedic operations were the most painful procedures during the first 48 hours. This study showed that an important number of patients still experience moderate to severe pain in the post-operative period after day-case surgery even after a 4 day period.

Pain was operationally defined and measured by numeric and visual analog rating scales, and an open-ended questionnaire was developed by one research team. Six out of seven studies measured pain as an outcome variable and three of the six reported a statistically significant reduction in pain levels of patients who used guided imagery post-operatively ($p < .05$), however findings were mixed. The study reported remarkable difference in POD 1 through 5 pain scores (0=no pain to 10 = worst pain) for patients in the guided imagery group (2.0 to 0.5) versus the control group (7.5 to 5.0; $p < .01$). Moreover, the mean increase in pain scores, expressed as percent (%) change, was significantly lower for the guided imagery group in comparison to the control group (218% vs. 627%, $p < .01$). These results were not fully supported by findings from a replication study by Deisch et al.(2000), which showed a significant difference in pain scores on POD 2 only ($p < .05$), but no significant difference in postoperative pain scores between two groups across time periods ($p > .05$). Pain scores were also significantly lower on POD 1 ($p < .01$) to POD 2 ($p < .04$) for patients who received a CAM package (i.e., guided imagery + usual care) when compared to a group of patients receiving usual care only.

The worldwide statistics of number of surgeries per day is increasing day by day. In UK total number of operations in 2005-2006 was around 7 million. From the reviews and the studies using a systematic collection of data, the estimated incidence of chronic pain after various procedures .i.e. amputation is about 60%, thoracotomy 50%, breast surgery about 30%, cholecystectomy 10%. Pain is a significant problem in peri-operative settings. Patients report lack of information about effective pain control measures.

A patient-based national survey on post-operative pain management reveals that pain intensity monitoring was prescribed for only 2% of cases. However, written post-operative pain evaluation was frequent in surgical wards (93.7%), at intervals of 41 hours. Pre-operative pain was reported at the site of surgery in 62.7% of patients. Patients reporting pre-operative pain had significantly more intense post-operative pain at rest (ANOVA, $p=0.0002$) and when moving (ANOVA, $p=0.001$), than patients without pre-operative pain. Severe pain was present in 4.2% of patients at rest, 26.9% of patients during movement and maximal pain since surgery was severe in 50.9% of patients.

Phillip &Schroeder(2010) conducted ameta-analysis of randomized controlled trials (RCTs) assessing the effectiveness of a non-pharmacological intervention on the management of pain. Forty-nine relevant primary studies were identified and retrieved. There is evidence, in the form of primary studies, to suggest that non-pharmacological nursing interventions are effective in the management of pain.

Guided imagery as an alternative therapy is effective in management of pain. Historically, imagination as a treatment has been used by many cultural groups, including the Navajos, ancient Egyptians, Greeks and Chinese. Imagination has also been used in religions such as Hinduism and Judaism as a healing method. Guided imagery is a simple tool which can empower anyone to become a participant in their own healing.

Guided imagery involves far more than just visual sense and this is a good thing given only about 55% of people have vision as their primary imaginative skill. Over past 24 years the effectiveness of guided imagery has been established by research findings and that demonstrate its positive impact on health.

The purpose of this investigation was to evaluate the effects of guided imagery on post-operative outcome in patient undergoing surgical procedure. The change in anxiety levels decreased in the guided imagery group (p-041). The use of guided imagery in the ambulatory surgery setting can significantly reduce pre-operative anxiety which can result in less pain.

Another study conducted by Harvest Medical School researchers found that for more than 200 patients undergoing invasive vascular or renal surgery, guided imagery controlled pain and anxiety more effectively than medication alone.

Guided imagery and relaxation have been shown to improve the post-operative course of adult surgical patients. Guided imagery significantly reduces the pain associated with invasive procedure and improves selected medical conditions.

A low cost guided imagery based program to prepare patient for surgery helps to lower pre-surgical anxiety, reduces pain, the need for post-operative medication, shortens procedure time, shortens hospital stay and possibly reduces surgical bleeding and speeds up recovery.

Mind-body approaches to coping up with surgery since pharmacologic sedation often increases the risk of low blood pressure and lack of oxygen. Doctors

have looked at other ways to reduce pre-surgical anxiety. Most effective have been relaxation with guided imagery (self-hypnosis or relaxation with guided imagery), used before and during surgery has resulted in shorter surgical and medical procedures. These techniques can also significantly reduce post-surgical pain and the need for post-operative pain medication, shorten the time it takes to return to normal functioning and reduce the length of hospital stay. There is also some evidence that mind body therapies like hypnosis and guided imagery can reduce blood loss and speed up wound healing. Hypnosis and guided imagery have been used effectively in back and neck surgeries.

Over the past 25years, the effectiveness of guided imagery has been increasingly established by research findings that demonstrate its positive impact on health, because of that the researcher has selected guided imagery for research study.

STATEMENT OF THE PROBLEM

A STUDY TO EVALUATE THE EFFECTIVENESS OF GUIDED IMAGERY ON PAIN AMONG PATIENTS WHO UNDERWENT ABDOMINAL SURGERIES IN A SELECTED HOSPITAL AT COIMBATORE.

OBJECTIVES:

- To assess the level of pain among patients who underwent abdominal surgeries in experimental and control group.
- To determine the effectiveness of guided imagery on level of pain among patients who underwent abdominal surgeries in experimental group.
- To find out the association between levels of pain among patients who underwent abdominal surgeries and their selected demographic variables.

OPERATIONAL DEFINITION

Effectiveness:

The degree to which something is successful in producing a desired result; success;

It refers to the extent to which guided imagery has produced differences in mean pre and post-test level of pain among patients who underwent abdominal surgeries, which is statistically significant.

Guided imagery

It refers to both relaxation and distraction techniques, which include simple form of audio and visualization of pleasant natural scenery. These techniques are used by the researcher with the duration of 10-15 minutes for 3 consecutive days to reduce the level of pain.

Pain

It refers to unpleasant subjective sensation experienced by patients who underwent abdominal surgeries on the 1st, 2nd and 3rd day of surgery is measured by Numerical pain rating scale and it's score.

Abdominal surgeries:

Abdominal surgeries refer to any surgical incision made on an abdominal wall and organs for therapeutic and diagnostic purpose such as appendicectomy, hernioplasty, laparotomy, gastroduodenectomy and abdominal hysterectomy.

ASSUMPTION

- Patients who underwent abdominal surgeries will have some level of pain for the first 3 days.
- Guided imagery is one of the non-pharmacological methods of reducing pain among patient with abdominal surgeries.
- The level of pain will be influenced by their selected demographic variables.

HYPOTHESES:

H_1→ There is a significant difference between the mean pre-test and post-test level of pain among patients who underwent abdominal surgeries in experimental group.

H_2→There is a significant difference between the mean post-test levels of pain among patients who underwent abdominal surgeries in experimental and control group.

H_3→There is a significant association between level of pain among patients who underwent abdominal surgeries and their selected demographic variables in experimental group.

DELIMITATIONS:

- The study is delimited to patients who underwent major abdominal surgeries only.
- Data collection period is 5 weeks only.
- The sample size is 60.
- Non-probability purposive sampling technique is used to select the samples.

PROJECTED OUTCOME:

- The study will help to evaluate the effectiveness of guided imagery on level of pain among patients who underwent abdominal surgeries.
- Practicing guided imagery will improve the psychological wellbeing of post-operative patients and in turn it will improve their quality of life
- The findings of the study will help the health professional to gain knowledge for furr researches.

Conceptual framework

Conceptual frame work helps to express abstract ideas in a more readily understandable or precise form than the original conceptualization. The conceptual framework for this study was derived from 'General System Theory' (Ludwig Von Bertlanffy, 1972). According to General System Theory, it is a set of interacting parts in boundary which makes the system work well in order to achieve its overall objectives.

General System Theory is useful in breaking the whole process into essential tasks to ensure goal realization. The number of parts of the system is totally dependent on what is needed to accomplish the goal or purpose. The goal is necessary for any system to function successfully. The aim of this study is to reduce the severity of pain among patients who underwent abdominal surgeries.

Bertlanffy explained that the system has three major aspects.

1. Input
2. Throughput
3. Output.

Input:

Input is the type of information that enters into the system from the environment through its boundaries.

In this study the input includes demographic variables such as age, gender, education, occupation, monthly income of the family, area of residency, type of family, past surgical history and previous knowledge regarding guided imagery to assess the level of pain among patients who underwent abdominal surgeries.

Throughput

Throughput is the operational phase. It is the process that allows the input to be changed so that it is useful to the system. Throughput is a guided imagery used on

patients who underwent abdominal surgeries.

Output

Output is any information that leaves the systems and enters the environment through system boundaries. Output is the change in the severity of pain among patients who underwent abdominal surgeries.0 indicates no pain, 1-3 is mild pain, 4-6 is moderate pain, 7-9 is severe pain and 10indicate the worst pain.+

Feedback

Feedback is necessary from those who belong to the group that falls under severe pain7-9 and worst pain 10.

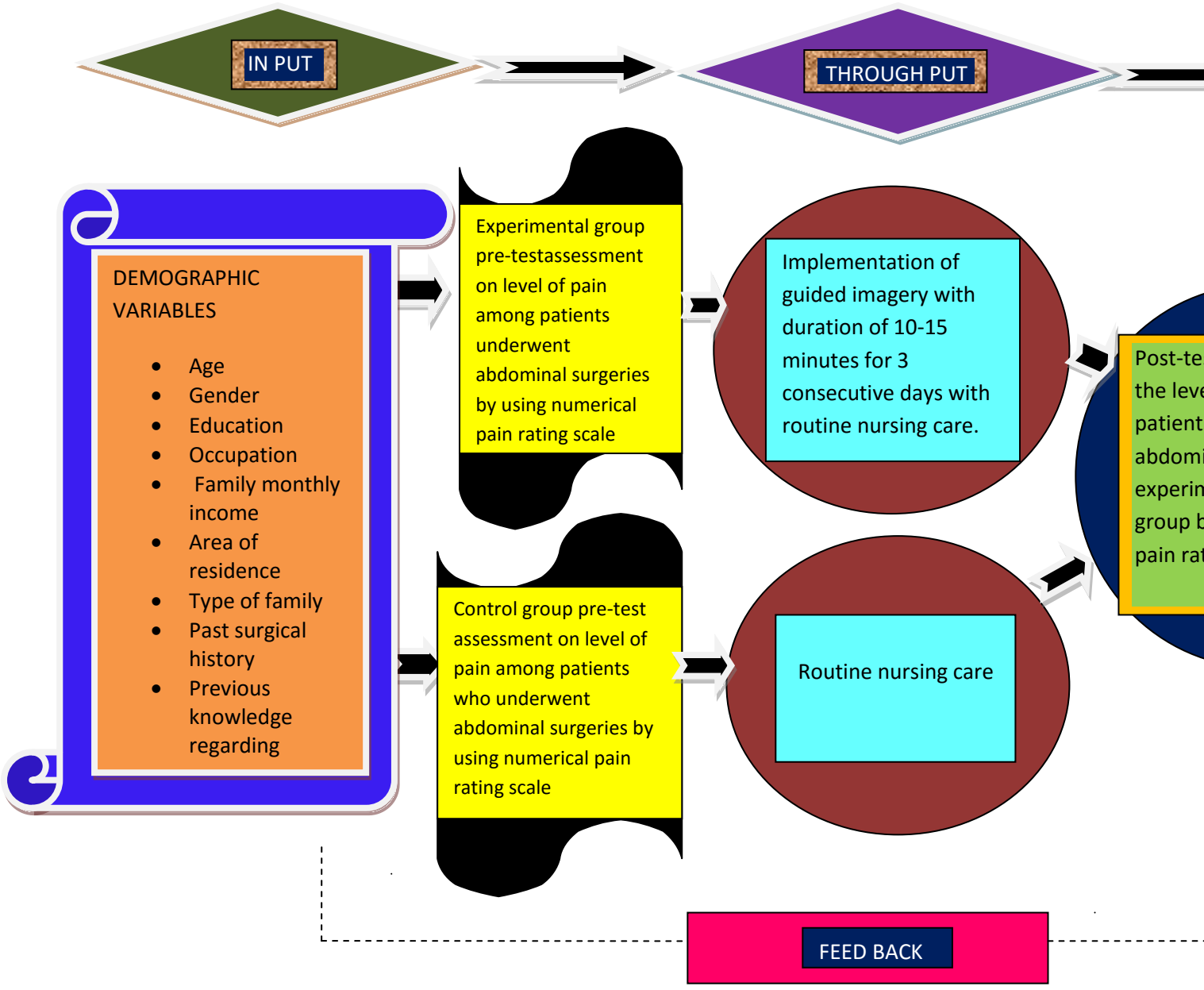

Fig. 1.1 Conceptual Frame Work based on Modified Ludwig Von Bertalanffy's General Syste

CHAPTER-II

REVIEW OF LITERATURE

The term literature review refers to the activity involved in identifying and searching for information on a topic and developing and understanding the state of the knowledge of the topic. The term is also used to designate a written summary of the state of the art on a research problem.

Review of literature is the writings of recognized authorities and findings of previous researchers, which provides the evidence to the researcher who is familiar with what is already known and what is still unknown.

According to **Polit and Hungler (2003),** literature review is a written summary of the state of existing knowledge on a research problem. The task of reviewing research literature involves the identification, selection of a critical analysis and written description of existing information on a topic.

Literature related to prevalence of post-operative pain in abdominal surgery

Literature related to post-operative pain

Literature related to effect of guided imagery on post-operative pains.

Review related to the prevalence of post-operative pain in abdominal surgery

Conrad A,Routh WT(2007)conducted a study on the prevalence of post-operative pain in a cross-sectional group of patients after day-case surgery in a university hospital The result on the day of the operation, 26% of the patients had moderate to severe pain (defined as mean VAS >40 mm). Mean VAS-scores were greater than 40 mm in 21% on postoperative day (POD) 1, in 13% on POD 2, in 10% on POD 3 and in 9% on POD 4.

Gouvas.N, Tan E (2009) conducted a study on the prevalence of post-operative pain in a sample of 1490 surgical patients in Bengal Hospital. To measure the prevalence of post-operative pain, an assessment was made of 1490 surgical in patients who were receiving postoperative pain treatment according to an acute pain protocol. Results of this study states that, moderate or severe pain was reported by 41% of the patients on day 0, 30% on day 1 and 19%, 16% and 14% on days 2, 3 and 4. The prevalence of

moderate or severe pain in the abdominal surgery group was high on post-operative day 0–1 (30–55%).

C.Ramesh(2011) conducted a study in a west Asian country about the contradictions between the prevalence of post-operative pain and pain relief satisfaction. According to this study post-operative pain is highly frequent and its management remains inadequate. Fifty-five oncologic patients who had undergone surgical procedures were assessed about their pain experience and satisfaction with pain relief. The results showed that 78.2% had experienced pain in the first 24 hours of post-operative period. The mean intensity of pain was 5.6. 58.3% experienced moderate pain and 27.1% severe pain.

Wan.T.J(2015)conducted surveys recently, which indicate that postoperative pain still remains inadequately treated. In addition, it has been estimated that up to 5% of individuals undergoing surgery will develop severe persisting pain leading to chronic physical disability and psychosocial distress. In a number of studies, pre-existing pain and high-intensity post-operative pain have been the predictors of developments of persisting pain after surgery.

Literature related to post-operative pain

Kaur, Nirmal (2007) conducted a study to assess the effectiveness of planned pre-operative teaching on early ambulation for patients undergoing abdominal surgery in UK. A quasi experimental design was adopted using convenient sample of 30 subjects, allotted samples of 15 in each experimental and control group. Pre-operative teaching plan on early ambulation was developed,after extensive review of literature and expert opinion. It includes the steps on deep breathing exercises, extremities exercises, up and down walking, maintenance of daily routine activities and progressive ambulation. A checklist with 40 items was used in the level of performance pre-operatively, before the implementation of teaching on early ambulation as well as on the 3^{rd} 5^{th} POD. Control group did not receive any pre-operative teaching. Data were analysed using both descriptive and inferential statistics. The major findings of the study revealed a non-significant difference of pre-test performance scores between the two groups ($p>0.05$) before the implementation of planned pre-operative teaching on early ambulation.

Moshi(2011)conducted a study in Kilimanjaro Christian Medical Centre**.**In this studyPOP and patients' satisfaction with pain relief scores were assessed using

pain and satisfaction numerical rating scales. Pain assessment was done 24 hours and 48 hours after operation. Satisfaction was assessed on 48 hours post-surgery. All adult patient aged 18 years and above who were operated in general surgery ward, KCMC and accepted by signing consent were involved in the study. Patients suffering from nervous system were excluded from the study. A total number of 124 patients were recruited and participated in the study. 65 (52.4%) were males and 59 (47.6%) were females. Mean age (SD) years 40.9 ± 15.4. The largest percentage of individuals had mild pain both at rest(45.2%) and during movement (44.4%). Patients whose analgesia was administered intravenously were more likely to be satisfied with POP management than those given intramuscular analgesics (*P*= 0.028). Analgesia used in combination increased significantly the proportion of pain free individuals, 48 hours post-operative compared to24 hours post-operative (*P*= 0.003). In conclusion, the post-operative pain management is still a challenge as nearly half of the patients had mild pain in the first 48 hours post-surgery.

Christopher Maier et al. (2010)conducted a study in German Hospital to assess the current status of pain management. The study was conducted among 2252 surgical and 999 non-surgical patients from 25 hospitals and the report shows that 12.4% surgical 16.7% of non-surgical patients reported no pain,29.5% of the surgical,36.8% of the non-surgicalpatients reported severe pain while moving and 50% of the surgical,57% of the non-surgical patients reported that they were not satisfied with their pain management interventions. 45.6% of inadequate pain management was observed in surgical group and 29.6% in non-surgical group.

John.Mec (2011) performed a study in a medical centre in Rajkot. To assess the prevalence and course of postoperative pain in the early post-operative period after ambulatory surgery and 648 patients who underwent day-case surgery were included in study. Data were collected with interviews and questionnaires and pain intensity was measured using a visual analogue scale (VAS) during 4 days after surgery. Results showed that on the day of the operation, 26% of the patients had moderate to severe pain (defined as mean VAS >40 mm). Mean VAS-scores were greater than 40 mm in 21% on postoperative day (POD) 1, in 13% on POD 2, in 10% on POD 3, and in 9% on POD 4. Operations of nose and pharynx, abdominal operations, plastic surgery of the breasts and orthopaedic operations were the most painful procedures during the first 48 hours. This study showed that an important

number of patients still experience moderate to severe pain in the post-operative period after day-case surgery even after a 4 day period.

Hans et al., (2013) conducted a study in German hospital, to assess the pain intensity on the first day after surgery, to improve post-operative pain therapy and to develop procedure specific to optimize pain treatment protocols. The study recruited 115,775 patients from 578 surgical wardswith 70764 patients who were asked to rate their worst pain intensity since surgery with numeric scale 0-10. Results revealed that 40 procedures with the highest pain scores (median numeric scale, 6-7) included 22 orthopaedic/trauma procedures on the extremities. Patients reported high pain scores after many major surgical procedures, including appendectomy, cholecystectomy, haemorrhoidectomy and tonsillectomy, which ranked among 25 procedures with higher pain intensities.

Literature related to the effect of guided imagery on post-operative pains.

Kiviluoma.K (2008)conducted a randomized single blind study in west Bengal on the "effects of guided imagery on post-operative outcomes in patients undergoing same day surgical procedures" It was conducted with sample size 44. Adults (n=44) scheduled for head and neck procedure were randomly assigned into 2 groups. This study revealed that anxiety level decreased significantly in guided imagery group (p=.002). After 2 hours, guided imagery group reported significantly less pain (p=.041). In addition, length of stay in PACU in intervention group was an average of 9 minutes less than in the case of control group (p=0.055).

Azidah AK,Marym (2009) conducted a study on "imagery reduces children's post- operative pain" in Medical Centre in Pondicherry. In this study 73 children of aging 7-12 years having tonsillectomy and adenoidectomies in ambulatory surgery were assigned to treatment group (n=36) and control group(37). Children in intervention group reported significantly less pain i.e. 28.3% less sensory pain and 8.5 % less affective pain.

Daisy R.Richard (2010) conducted a study in Nigeria on guided imagery as a coping up strategy for pre-operative patients and in this study, patients (elective colorectal patients) {n=130} were randomly assigned experimental and control group. The experimental group patients received guided imagery tape. Results showed that post operatively, median increase in the worst pain score was 72.5 for control group

and 42.5 for imagery group ($p<0.0014$) and least pain was also significantly different ($p<0.001$) with a median increase of 30 for control and 12.5 for imagery group.

Hendry (2010)conducted a study in UK, to identify the effectiveness of imagery instruction and control of post-surgical pain, with samples of 32 individuals having elective surgery .They were allocated into control (procedural information only) group (n=16) and experimental group (n=16) who received procedural information and instruction regarding the use of pleasant imagery. Scores on visual analogue scale and recorded doses of analgesics administered post-operativelyprovided measures of perceived pain and analgesic consumption among the patients who received the imagery. They felt significantly less post-surgical pain and consumed significantly less pain medication than the control group did($p<0.05$). These findings suggest that nurses can enhance the management of post-operative pain by teaching patients to use pleasant imagery.

Posadzki. P(2011) conducted a study Sri Ramachandra Hospital in Chennai, The study was conducted to find out the effectiveness of alternative methods in bypass surgery pain. Twenty patients were randomized to one of the three treatments. After leaving the intensive care unit, patients in the acupuncture and massage groups received treatment. The guided imagery group received treatment before, during and after surgery. Patients in the acupuncture group received therapy in which the acupuncture points related to relaxation and anxiety were stimulated. Those in the massage group received therapy for muscles likely to spasm after bypass surgery. Those in the guided imagery group listened to an audio message designed to cause relaxation. Results showed that these methods are very effective.

Wyatt, L (2011) conducted a study in child care centre in Bhutan. 60 children (8-12yrs) who had undergone appendectomy or lower limb surgery and had been randomly assigned to the experimental group (n=30) listened to an imagery trip CD where as those in control group (n2=30) received standard care. An investigator developed questionnaire and visual analogue scale was used to assess the intensity of pain (before, immediately after and 1 hour after intervention or standard care). The children in the experimental group reported having significantly less pain ($p<.001$) than the control group and there were no significant difference in nurse assessed pain scores, the type and time of operation were related to pain intensity in children. They concluded that the nurses underestimated the pain of paediatric patients.The imagery

trip CD can be used to reduce the children's post-operative pain in a hospital setting, although its effect is short lasting.

Larsson, S (2013) conducted a study in Karnool on the use of guided imagery to manage pain in an elderly orthopaedic population and in these two groups, experimental repeated measures designed, sample of 13 patients who have undergone joint replacement surgery in the age of 55 years, were recruited into 2 groups. The control group received usual care and a music audio tape and the experimental group received usual care and a guided imagery audio tape. Trends in this pilot study demonstrated positive outcomes for pain relief, decreased anxiety and decreased length of stay. Researcher concluded that complementary therapy holds the promise of increasing positive outcomes. Further research is needed to validate the findings with a larger post-operative samples and in other populations too. Researcher recommended that there is a critical need to incorporate the use of guided imagery and other complementary therapies into all nursing curricula. Nurses must develop expertise and be ready and able to perform as patient actors and advocates in the use of these interventions in programs of care and institutional policy.

CHAPTER III

RESEARCH METHODOLOGY

Research methodology is the overall plan for addressing the research problem. It covers multiple aspects of the study's structure. It acts as a guide for planning, implementation and analysis of the study.

According to **Polit and Hungler (2004),** methodology refers to ways of obtaining, organising and analysing data. Methodology decisions depend on the nature of the research question.

This chapter deals with description of the different steps undertaken by the investigator in the study. It includes the research approach, design, settings, variables, population, sample size, sample technique, sample criteria, description of the tool, content validity, pilot study, ethical consideration, data collection procedure and plan for data analysis.

RESEARCH APPROACH

According to **Polit and Beck (2006),** research approaches are plan and the procedures for research that span the steps from broad assumptions to detailed methods of data collection, analysis and interpretation.

The research approach adopted for the present study is quantitative evaluative approach.

RESEARCH DESIGN

According to **Polit and Beck (2010),** research design is the overall plan for addressing a research question, including strategies for enhancing the study's integrity.

The design for the present study is Quasi experimental i.e., Non-equivalent pre-test post-test with control group design.

E O_1 x O_2

C O_1 _ O_2

Keys:

E - Experimental group

C - Control group

O_1 -Pre-test assessment of level of pain among patients who underwent abdominalsurgeries

X - Implementing Guided imagery

O_2-Post-test assessment of level of pain among patients who underwent abdominal surgeries

VARIABLES UNDER THE STUDY

Independent variable

Guided imagery

Dependent variable

Level of pain

STUDY SETTING

The study setting is the physical location in which study is conducted. (**Nancy Burns and Susan. K. Groove 2007).**

Selection of area is one of the essential steps in the research process.

The selection of the hospital for the present study was on the basis of

- ✓ Availability of the subjects
- ✓ Feasibility of conducting study
- ✓ Economy of time and money

The study was conducted in Kongunad Hospital, Coimbatore, which is a 250 bedded multi-speciality hospital with 24 hours emergency service and diagnostic facilities. It is situated in the heart of Coimbatore city and is about 500 meters from the Kongunadu College of Nursing.The hospital comprises of 7 floors with all facilities, out-patient department, emergency department, in-patient department, cardiac care unit, intensive care unit, one minor OT, two major OT and two post-operative wards. Post-operative ward includes twenty four beds with all necessary equipments. Approximately 200-210 out-patients are registered every day. Approximately 3-4 patients per day are posted for abdominal surgeries like gastrectomy, open hernia repair, gastro duodenostomy and abdominal hysterectomy.

POPULATION

According to **Polit and Beck, (2010)** population is the entire set of individuals or objects having some common characteristics.

The population of the present study is patients who underwent abdominal surgeries.

Target population

According to **Polit and Beck (2010),** target population is the entire population in which a researcher is interested and to which he or she would like to generalize the study result.

The target population selected for this study is patients who underwent abdominal surgeries.

Accessible population

According to **Polit and Beck (2010),** accessible population is the population of people available for a particular study- often, anon- random subset of the target population.

Accessible population selected for this study is patients who underwent abdominal surgeries in Kongunad Hospitals Pvt.,Ltd. Coimbatore.

SAMPLE AND SAMPLING

Sample

According to **Polit and Hungler (1999),** sample is the subset of the population selected to participate in a research study.

The sample of the present study is patients who underwent abdominal surgeries inKongunad Hospital Pvt.,Ltd., Coimbatore and who fulfilled the inclusion criteria.

Sample Size

According to **Suresh K Sharma, (2011),** sample size is the number of subjects, events, behaviours or situations that are examined in a study.

The sample size comprised of 60 samples who underwent abdominal surgeries, in which 30 samples examined for experimental group and 30samples

examined for control group.

Sampling Technique

Non-probability purposive sampling technique is used to select the samples.

CRITERIA FOR SAMPLE SELECTION

According toSuresh K Sharma (2013), sampling criteria is the list of the characteristics essential for inclusion or exclusion in the target population.

Inclusion criteria:

- ✓ Patients who are in the age group 20-60 years
- ✓ Patients both male and female
- ✓ Patients who underwent abdominal surgeries like gastrectomy, open hernia repair, gastro duodenostomy and abdominal hysterectomy
- ✓ Patients who are in the 1st post-operative day
- ✓ Patients who are willing to participate in this study

Exclusion criteria:

- ✓ Patientswho are critically ill
- ✓ Patients who are practicing other alternative therapy
- ✓ Patients who are having eye and ear problem
- ✓ Patients who underwent diagnostic laparoscopic procedure

METHOD OF DATA COLLECTION

(i)Tool

According to **Carol.l.Macnee, 2004,** the study methods used to collect data are intended to allow the researcher to construct a description and meaning of the variable under study.

Structured interview schedule consists of Numerical pain rating scale Mc.Caffery (1989) is deployed to assess the level of pain among patients who underwent abdominal surgeries.

(ii)Description of Tool:

The tool consists of two sections i.e., Demographic data and Numerical pain rating scale Mc. Caffery (1989) is deployed to assess the level of pain.

Section-A:Demographic variables of patients who underwent abdominal surgeries.

Demographic data consists of 10 items such as age, gender, education, occupation, monthly income, area of residency, type of family, name of the surgery, past surgical history and previous knowledge regarding Guided imagery.

Section-B:

Numerical Pain rating Scale Mc. Caffery (1989) is deployed to assess the level of pain among patients who underwent abdominal surgeries.

Table 3.1 score interpretation

S. No	Level of pain	Score
1	No pain	0
2	Mild pain	1-3
3	Moderate pain	4-6
4	Severe pain	7-9
5	Worst possible pain	10

ETHICAL CONSIDERATION

Prior written permission is obtained from the managing director of Kongunadu Hospital Pvt Ltd. Coimbatore. Verbal consent isobtained from the samples to conduct the study and assurance is given for the confidentiality of the information given by the samples.

CONTENT VALIDITY

Polit and Hungler, (1999) defined content validity as the degree of which the item in an instrument adequately represents the universe of the content.

Validity of the tool is obtained from four experts in the field of medical surgical nursing and one expert in the field of surgery. Corrections in demographic variables are incorporated based on the expert's opinion.

PILOT STUDY

According to **Polit and Hungler, (1999)** pilot study refers to a small scale version or trial run done in preparation for a major study. Pilot study tests the reliability, practicability, appropriateness and feasibility of the study and the tool.

After obtaining formal permission from the Managing Director of Kongunad Hospitals Pvt, Ltd, Coimbatore, pilot study was conducted in the month of February 2016. Totally 10 patients who underwent abdominal surgeries were selected by using purposive sampling technique. In experimental group 5 samples were selected to assess the pre-test level of pain by using Numerical pain rating scale. Guided imagery was implemented with the duration of 10-15minutes for 3 consecutive days. Post-test was done immediately after intervention daily. The same procedure was followed in control group without intervention. The study was found to be feasible and practicable.

DATA COLLECTION PROCEDURE:

The prior formal permission was obtained from the Managing Director of Kongunadu Hospital Pvt.Ltd.to conduct the study. After obtaining verbal consent from the participants the purpose of the study was explained to the samples. In experimental group 30 samples were selected by using purposive sampling technique. The pre-test was conducted by using Numerical pain rating scale, to assess the level of pain among 3-4 samples per day for 15 days. After pre-test guided imagery was implemented in the form of audio and visualization for 3 consecutive days to the samples daily with duration of 10-15minutes.Immediately after the intervention post test was conducted by using same Numerical pain rating scale. The same procedure was repeated for 3 consecutive days for each sample. Next 15 days, in control group pre-test and post test was conducted daily without intervention for 3 consecutive days for each sample

PLAN FOR DATA ANALYSIS:

The data obtained were analysed in terms of objectives of the study using descriptive and inferential statistics. The plan for data analysis was as follow.

Table 3.2 Plan for data analysis

Type of statistics	Method	Purpose
Descriptive statistics	Frequency, percentage, mean, standard deviation, mean difference and mean percentage.	• Assess the demographic variables and the level of pain among patients who underwent abdominal surgeries in experimental and control group. • Compare the pre and post-test level of pain among patients who underwent abdominal surgeries in both groups.
Inferential statistics	Paired t-test	• Evaluate the effectiveness of guided imagery on pain among patients who underwent abdominal surgeries in experimental group. • Compare the pre and post-test mean pain score among samples in control group.
	Independent t-test	• Evaluate the effectiveness of guided imagery on pain among patients who underwent abdominal surgeries between experimental and control group.
	Chi-square	• Association between level of pain among samples and their selected demographic variables in experimental group.

CONCLUSION:

This chapter includes description of research approach, research design, study setting, population, sample and sampling technique, selection criteria, selection and Description of the tool, content validity and pilot study, data collection procedure and plan for data analysis.

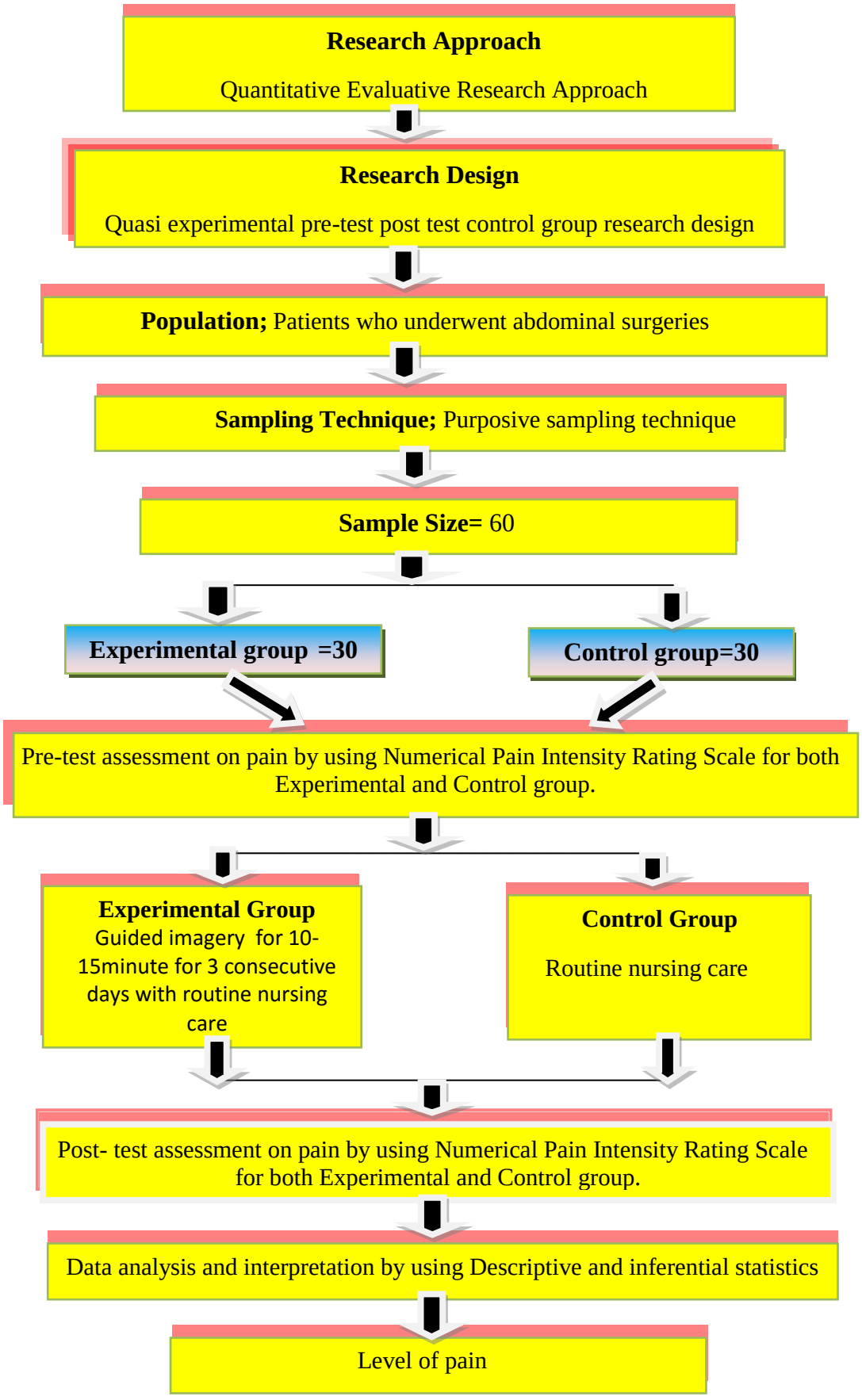

Figure-3.1: Schematic Representation of Research Methodology.

CHAPTER IV

ANALYSIS AND INTERPRETATION

According to **Polit and Hungler (2006),** analysis is a method of rendering data in quantitative, meaningful and intelligible manner, so that research problem can be studied and tested and the relationship between the variables can be found.

This chapter deals with analysis and interpretation of data collected from 60 patients who were admitted in Kongunad Hospital, Coimbatore in order to assess the effectiveness of Guided Imagery on patients to reduce the level of pain.

The collected data were analysed by using descriptive and inferential statistics which are necessary to provide substantive summary by the results in relation to the objectives.

Objectives

1. To assess the level of pain among patients who underwent abdominal surgeries in experimental and control group.
2. To determine the effectiveness of Guided imagery on level of pain among patients who underwent abdominal surgeries in experimental group.
3. To compare post test score level of pain among patients who underwent abdominal surgeries in experimental and control group.
4. To find out the association between level of pain among patients who underwent abdominal surgeries and their selected demographic variables.

Presentation of Data

The findings of the study were grouped, analysed, organized and presented under the following sections:

Section- A:

Distribution of samples according to their demographic variables among experimental and control group

Section-B:

Distribution of samples according to their mean post-test level of pain among experimental and control group.

Section-C:

Comparison between the mean post test score on level of pain among experimental and control group.

Section-D:

Testing hypotheses

Difference between the pre-test and post-test level of pain among samples in experimental group.

Difference between the post-test level of pain among samples in experimental and control group.

Association between level of pain and their selected demographic variables.

SECTION – A

Distribution of patients according to their demographic variables in experimentaland control group

Table: Frequency and percentage distribution of patients in experimental and control group according to their demographic variables.

n=60

S.No	Demographic variables	Experimental group		Control group	
		f	%	f	%
1.	**Age in years.**				
	1.1) 20-30 years.	6	20	6	20
	1.2) 31-40 years.	10	33.4	10	33.3
	1.3) 41-50 years.	9	30	6	20
	1.4)51-60 years.	5	16.6	8	26.7
2.	**Gender**				
	2.1) Male	12	40	13	43.3
	2.2) Female	18	60	17	56.7
3.	**Education**				
	3.1) No formal education	6	20	6	20
	3.2) Primary education	7	23.4	9	30
	3.3) Secondary education	10	33.4	4	13.3
	3.4) Higher secondary education	5	16.6	6	20
	3.5) Graduation	2	6.6	5	16.7

4.	**Occupation**				
	4.1) Unemployed	0	0	3	10
	4.2) Self employee	0	0	10	33.3
	4.3) Private employee	17	56.7	8	26.7
	4.4) Government employee	13	43.3	6	20
	4.5) Coolie	0	0	3	10
5.	**Monthly income of family**				
	5.1) Below Rs.5,000	6	20	8	26.7
	5.2) Rs.5,001-Rs.10,000	8	26.7	9	30
	5.3) Rs.10,001-Rs.15,000	10	33.3	7	23.3
	5.4) Above Rs.15,000	6	20	6	20
6.	**Area of residency**				
	6.1) Urban Area	16	53.3	13	43.3
	6.2) Rural Area	14	46.7	17	56.7
7.	**Type of family**				
	7.1) Joint family	14	46.7	15	50
	7.2) Nuclear family	5	16.6	14	46.7
	7.3) Extended family	11	36.7	1	3.3
8.	**Past surgical history**				
	8.1) yes	17	56.7	14	46.7
	8.2) No	13	43.3	16	53.3
9.	**Previous knowledge regarding Guided imagery**				
	9.1) yes	9	30	12	40
	9.2) No	21	70	18	60

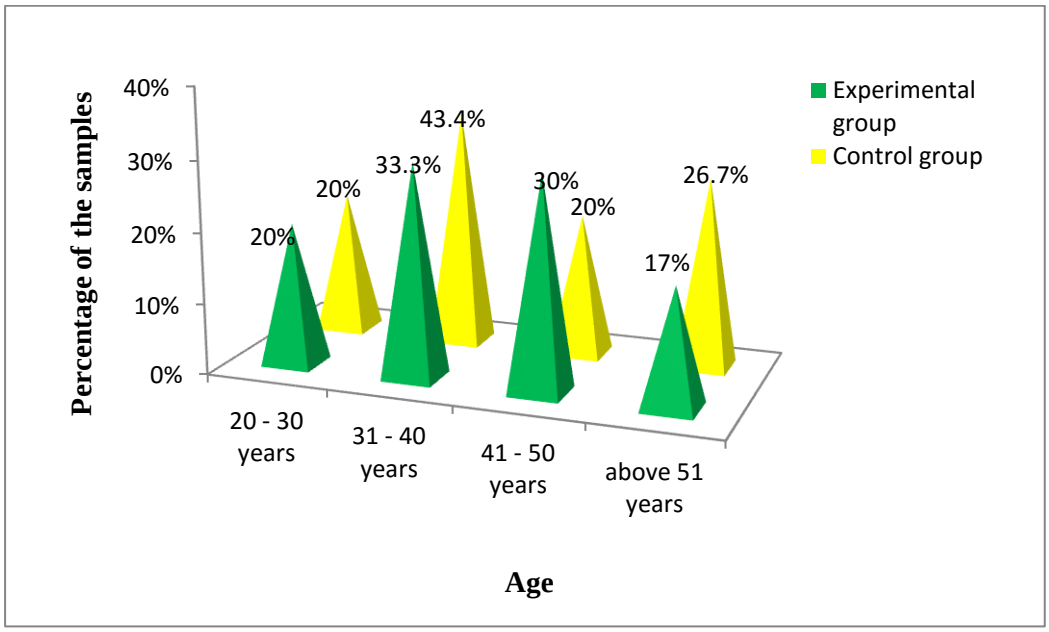

Fig.4.1.1 Percentage distribution of samples according to their age in experimental and control group

The above figure 4.1.1 shows that in experimental group, 9 (30%) sample belonged to 41 to 50 years, 10(33.3%) sample belonged to 31to40 years, 6 (20%) sample belonged to 20 to 30 years, and 5 (16.6) above 51 years.

In control group, 10(33.3%) sample belonged to 31 to 40 years, 8 (26.6%) sample belonged to above 51 years, 6(20%) sample belonged to 20 to 30 years and 6(20%) of the samples belonged to 41-50 years.

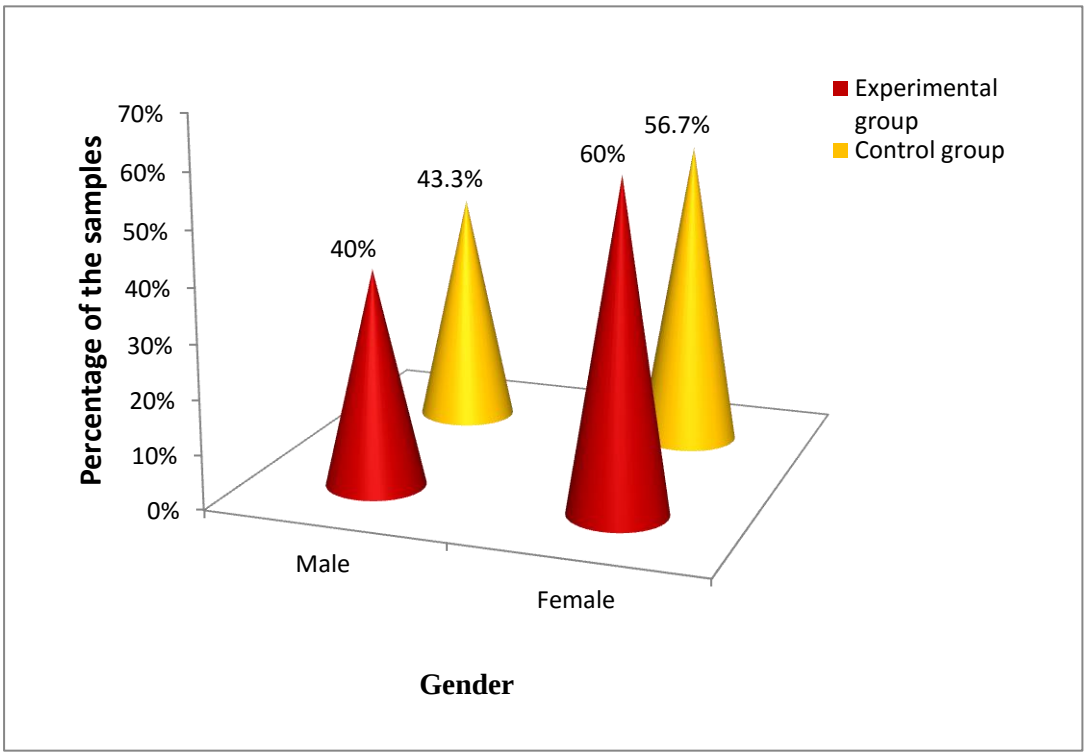

Fig.4.1.2 Percentage distribution of the samples according to their gender in experimental and control group

The above figure 4.1.2 shows that in experimental group, 18 (60%) of the samples were females and 12 (40%) of the samples were males.

In control group, 17(56.7%) of the samples were females and 13 (43.3%) of the samples were males.

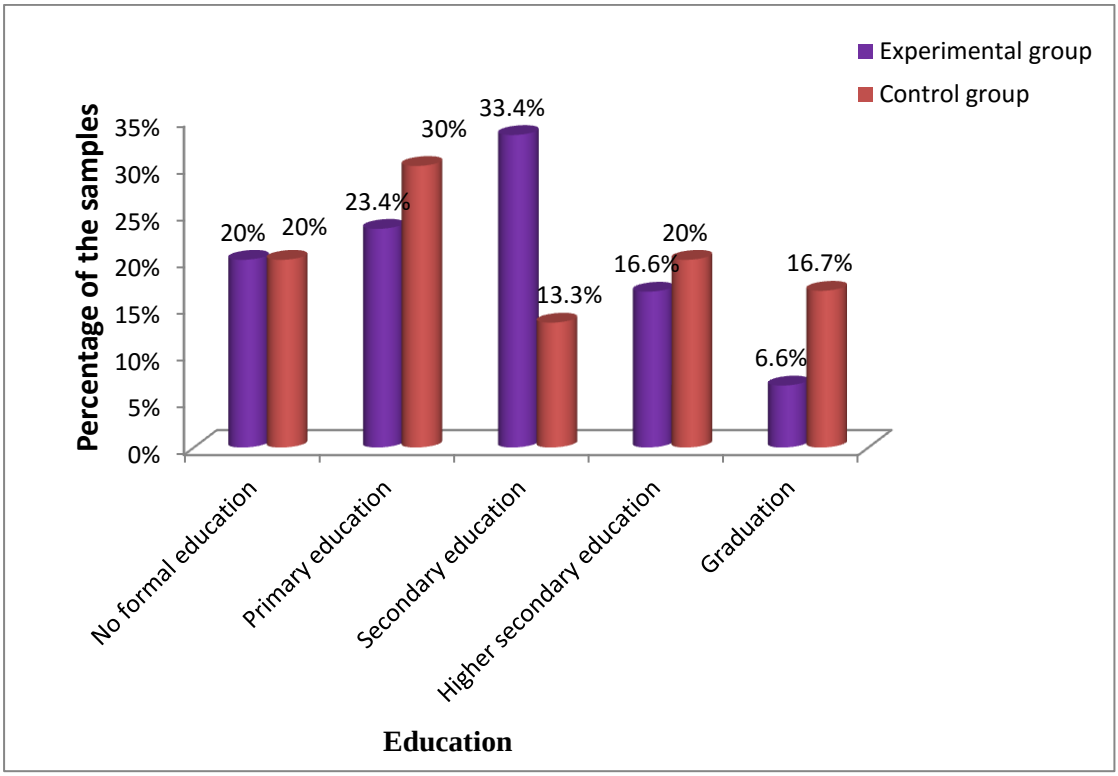

Fig.4.1.3 Percentage distribution of samples according to education in experimental and control group

The above figure 4.1.3 displays that in experimental group, 10 (33.4%) samples had secondary education, 7(23.4%) of the samples had primary education, 6(20%) samples had no formal education, 5(16.6%) samples had higher secondary education and least percentage 2(6.6%) of the sample were graduates.

In control group, 9 (30%) samples had primary education, 6(20%) of the samples were higher secondary education, 6 (20%) of the samples had no formal education,5(16.7%) of the samples were graduates and 4 (13.3) had secondary education.

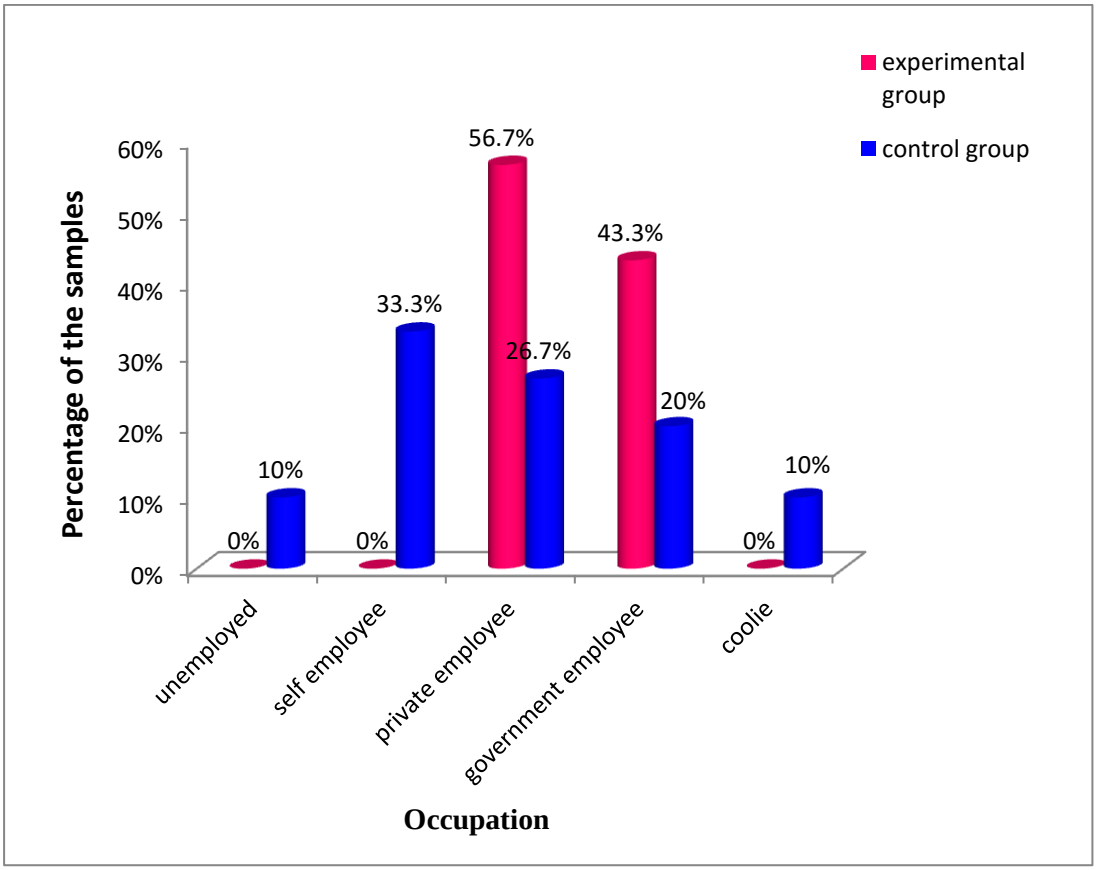

Fig.4.1.4 Percentage distribution of samples according to their occupation in experimental and control group

The above figure 4.1.4 shows that in experimental group, 17 (56.7%) samples were private employees, whereas 13(43.3%) samples were government employees, none(0%) of the samples was unemployed, self-employee and coolie.

In control group, 10 (33.3%) samples were self-employees, 8 (26.7%) samples were private employees, 6 (20%) samples were government employees, and 3 (10%) samples were unemployed, 3(10%) of the sample were coolies.

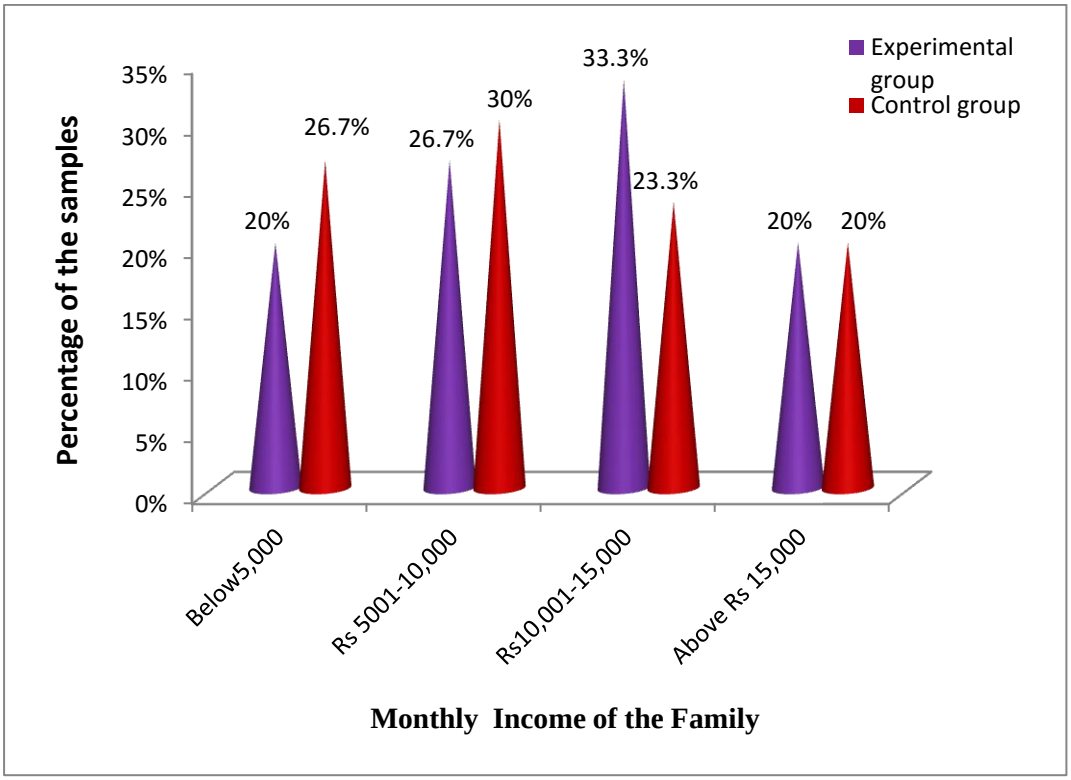

Fig.4.1.5 Percentage distribution of samples according to the monthly income of family in experimental group and control group

The above figure 4.1.5 reveals that in experimental group,10(33.3%) of the sample were earning Rs.10001/-Rs.15000/-, 8 (26.7%) were earning monthly income of Rs.5001/-Rs.10000/-, 6 (20%) samples were earning below Rs.5000/- and 6(20%) were earning above Rs.15000/-.

In control group 9 (30%) samples were earning monthly income of Rs.5001-Rs10000, 8(26.7%) of the samples were earning below Rs 5000, 7(23.3%) samples were earning Rs10, 001/-15,000/ and 6(20%) samples were earning above Rs15.000/.

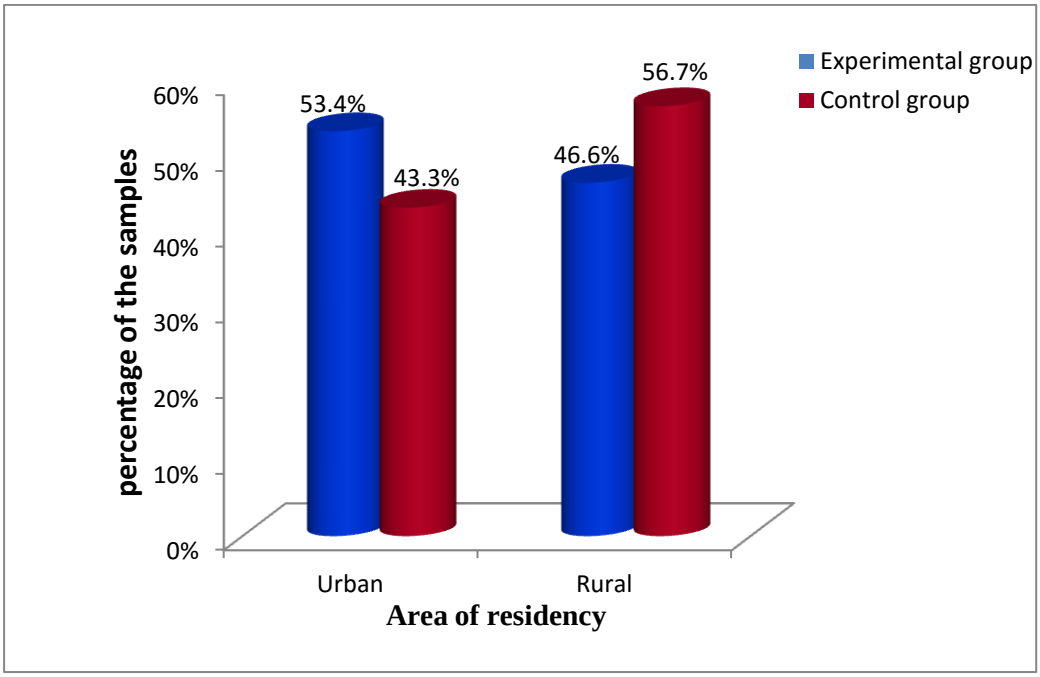

Fig.4.1.6 Percentage distribution of samples according to their area of residency in experimental and control group

The above figure 4.1.6 reveals that in experimental group, most of the samples 16 (53.4%) were from urban area and 14 (46.6%) samples were from rural area.

In control group, 17 (56.7%) of the samples were from rural area and 13(43.3%) samples were from urban area.

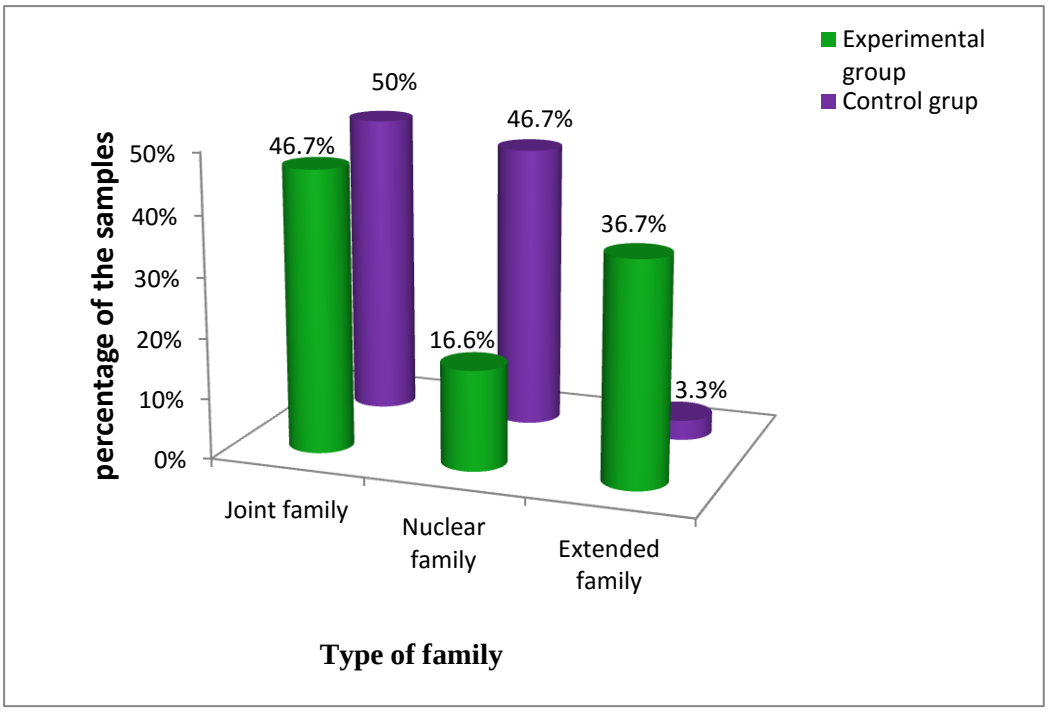

Fig.4.1.7 Percentage distribution of samples according to their family type in experimental and control group

The above figure 4.1.7 reveals that in experimental group, 14 (46.7%) of thesamples belonged to joint family, 11 (36.7%) sample belonged to extended family and 5(16.6%) of the samples belonged to nuclear family.

In control group, half of the sample 15 (50%) belonged to joint family, 14 (46.7%) sample belonged to nuclear family and least percentage 1(3.3%) of the sample belonged to extended family.

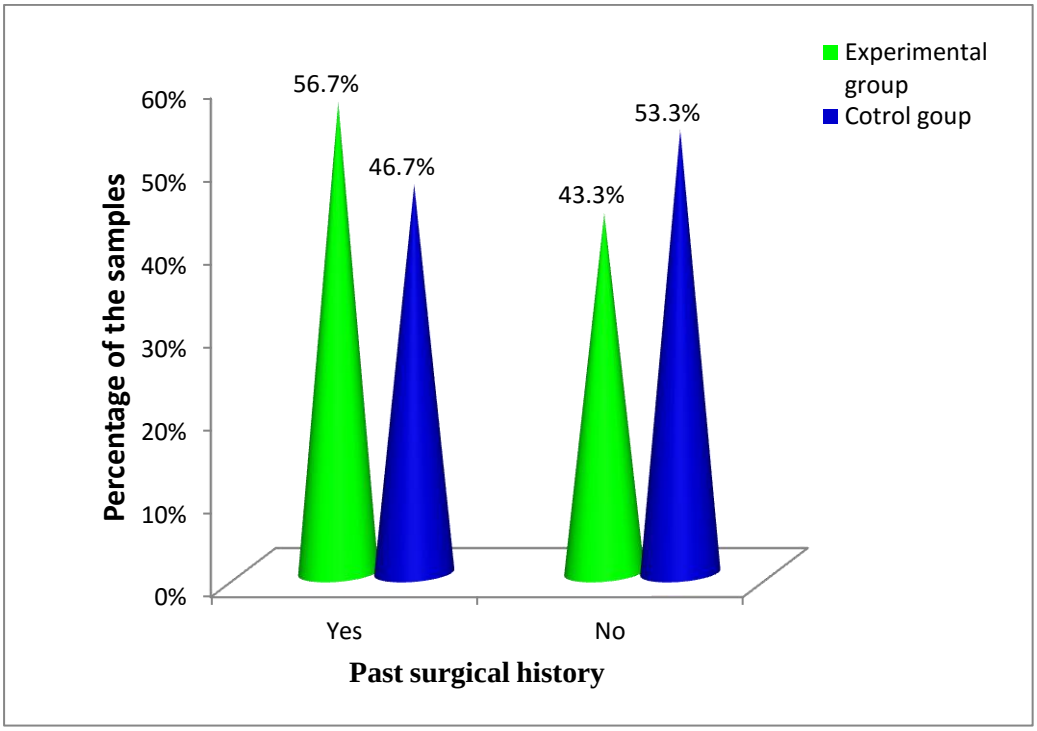

Fig.4.1.8 Percentage distribution of samples according to their past surgical history in experimental and control group

The above figure 4.1.8 reveals that, in experimental group, nearly 17 (56.7%) samples had past surgical history and only 13 (43.3%) samples had no past surgical history.

In control group, 16 (53.3%) samples had no past surgical history and 14(46.7%) of the samples had past surgical history.

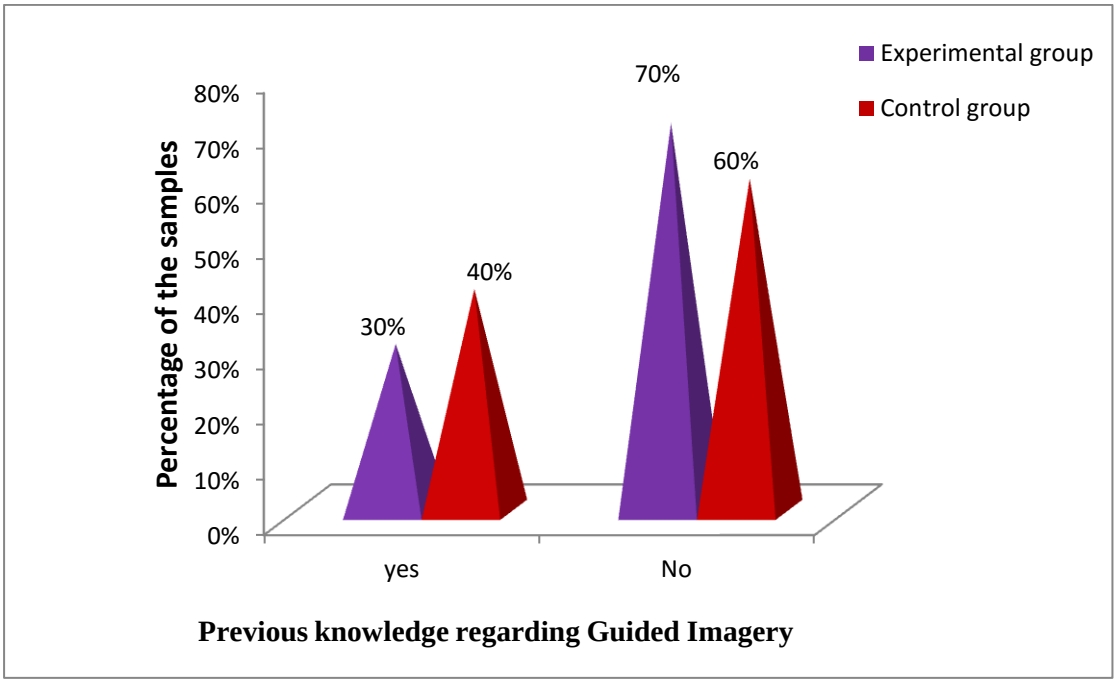

Fig.4.1.9 Percentage distribution of samples according to their previous knowledge regarding guided imagery in experimental and control group

The above figure 4.1.9 reveals that in experimental group, most of the samples 21 (70%) did not have previous knowledge regarding guided imagery and 9(30%) of the samples had previous knowledge regarding guided imagery.

In control group, majority of the samples 18 (60%) did not have previous knowledge regarding guided imagery and 12 (40%) of the samples had previous knowledge regarding guided imagery.

SECTION –B

Assessment of Pre and post-test level of pain among the samples in experimental group

Table 4.2 Experimental group

n=30

Level of pain	Pre test						Post test					
	Day –I		Day-II		Day-III		Day-I		Day-II		Day-III	
	n	%	n	%	n	%	n	%	n	%	n	%
No pain	0	0	0	0	0	0	0	0	3	10	5	16.7
Mild pain	0	0	7	23.3	7	23.3	8	26.7	12	40	15	50
Moderate pain	10	33.4	10	33.4	10	33.4	8	26.7	7	23.3	10	33.3
Severe pain	18	60	12	40	12	40	13	43.3	8	26.7	0	0
Worst pain	2	6.6	1	3.3	1	3.3	1	3.3	0	0	0	0

Table 4.2 shows that in pre-test experimental group Day-I 18(60%) of the samples had severe pain, 10(33.4%) of the samples had moderate pain, 2(6.6%) had worst pain, none (0%) of the samples had no pain and mild pain. Day –II 12(40%) of the samples had severe pain, 10(33.3%) of the samples had moderate pain, 7(23.3%) of the samples had mild pain, 1(3.3%) of sample had worst pain, none (0%) of the samples had no pain. Day –III 12(40%) of the samples had severe pain, 10(33.4%) of the samples had moderate pain, 7(23.3%) of the samples had mild pain, 1(3.3%) of the samples had worst pain and none(0%) of the samples had no pain.

In experimental group, post-test Day-I 13(43.3%) of the samples had severe pain, 8(26.7%) of samples had mild pain, 8(26.7%) of the samples had moderate pain, 1(3.3%) of the samples had worst pain and none (0%) of the samples had no pain. Day –II 12 (40%) of the sample had mild pain, 8(26.7%) of the sample had severe pain, 7(23.3%) of the samples had moderate pain,3 (10%) of the sample had no pain and none (0%) of the samples had worst pain. Day –III 15(50%) of the samples had mild pain, 10(33.3%) of the samples had moderate pain, 5(16.7%) of the samples had no pain and none (0%) of the samples had severe pain and worst pain.

Assessment of pre and post-test level of pain among samples in control group

Table 4.3 Control group n=30

Level of Pain	Pre test						Post test					
	Day –I		Day-II		Day-III		Day-I		Day-II		Day-III	
	n	%	n	%	n	%	n	%	n	%	N	%
No pain	0	0	0	0	0	0	0	0	0	0	1	3.3
Mild pain	0	0	4	13.3	4	13.3	5	16.7	9	30	11	36.7
Moderate Pain	15	50	14	46.7	14	46.7	13	43.3	11	36.7	18	60
Severe pain	12	40	11	36.7	11	36.7	10	33.3	9	30	0	0
Worst pain	3	10	1	3.3	1	3.3	2	6.6	1	3.3	0	0

Table 4.3 shows that in control group pre-test Day-I 15(50%) of samples had moderate pain, 12(40%) had severe pain,3(10%) of the samples had worst pain and none (0%) had no pain and mild pain. Day II 14(46.7%) of samples had moderate pain, 11(36.7%) of samples had severe pain, 1(3.3%) of samples had worst pain, none (0%) of the samples had no pain. Day III 14(46.7%) of samples had moderate pain, 11(36.7%) had severe pain,4(13.3%) had mild pain, and none(0%) of the samples had no pain.

In control group post-test Day-I 13(43.3%) of the samples had moderate pain, 10(33.3%) of samples had severe pain, 5(16.7%) of the samples had mild pain, 2(6.6%) of the samples had worst pain and none (0%) of the samples had no pain. Day –II 11 (36.7%) of the sample had moderate pain, 9 (30%) of the sample had severe pain, 9(30%) of the samples had mild pain,1(3.3%) of the samples had worst pain and none (0%) of the samples had no pain. Day –III 18(60%) of the samples were moderate pain,11(36.7%) of the samples had mild pain,1(3.3%) of the samples had no pain and none of the samples had severe pain and worst pain.

Comparison of mean pre-test post-test score on level of pain among patients in experimental and control group.

Table: 4.4: Mean Standard deviation and mean difference of pre and post-test level of pain among the samples in experimental and control group.

n=60

	Group		Pre test		Post test		Mean Difference
		DAY	**Mean**	**SD**	**Mean**	**SD**	
Level of pain	**Experimental group**	Day-I	7.1	1.2	4.7	2.7	4.4
		Day-II	5.9	1.5	3.2	2.5	2.7
		Day-III	4.9	1.7	1.8	1.5	3.1
	Control group	Day-I	7	1.8	6.6	2.2	0.4
		Day-II	6	1.8	4.9	2.1	1.1
		Day-III	6	1.7	2.6	1.5	3.4

The above table 4.4 shows that, the pre-test mean and standard deviation on level of pain among samples in experimental group Day-I mean scorewas 7.1 with standard deviation of 1.2 and post-test mean scorewas 4.7 with standard deviation of 2.7,mean difference was 4.4. In day-II pre-test mean scorewas 5.9 with standard deviation of 1.5 and post-test mean score was 3.2 with standard deviation of 2.5 and mean difference was 2.7. Day-III pre-test mean score was 4.9 with standard deviation of 1.7, in post-test mean score was 1.8 with standard deviation of 1.5 and the mean difference was 3.1.

In control group pre-test mean score was 7 with standard deviation of 1.8,the post-test mean score was 6.6 with standard deviation of 2.2 and mean difference was 0.4. Day-II pre-test mean score was 6 with standard deviation of 1.8 and, and post-test mean score was 4.9 with standard deviation of 2.1 and mean difference was 1.1. Day-III pre-test mean score was 6 with standard deviation of 1.7, in post-test mean score was 2.6 with standard deviation of 1.5 and the mean difference was 3.4.

SECTION - C

Effectiveness of Guided imagery on pain among patients underwent abdominal surgeries

Table 4.5: Mean, Standard deviation and paired‘t’ value on level of Pain among samples

n=30

Post-test group	Day	Mean	SD	Paired ‘t’ Value	df
Experimental group	Day-I	2.5	3	4.5*	29
	Day-II	2.5	3.1	4.4*	
	Day-III	3.1	2.2	7.7*	

Table value = 1.69 **Significant at p≤0.05**

The above table 4.5 portraits thePaired‘t’ test value which was calculated to analyse the effectiveness of guided imagery on patients who underwent abdominal surgeries to reduce the level of pain among experimental group. The calculated Paired‘t’ value Day -I was 4.5. Day -II was 4.41. Day -III was 7.7 significantly greater than the table value 1.69 at p≤0.05. Hence the hypothesis H_1 is accepted. It is evident that guided imagery was effective in reducing pain among patients who underwent abdominal surgeries in experimental group.

Mean, standard deviation and independent‘t’ test value on pain among samples in experimental and control group

Day	Groups	Mean	SD	Independent ‘t’ test	df

Day –I	Experimental group	4.7	2.7	6.8*	58
	Control group	6.6	2.2		
Day –II	Experimental group	3.2	2.5	6.1*	
	Control group	4.9	2.1		
Day –III	Experimental group	1.8	1.5	5.1*	
	Control group	2.9	1.5		

Table 4.6

Table value = 1.69 Significant at p ≤ 0.05

The above table 4.6 depicts the independent‘t’ test value in experimental group Day-I mean score was 4.7 with standard deviation of 2.7. In control group Day –I mean score was 6.6 with standard deviation of 2.2 independent‘t’ test value was 6.8. Day II experimental group mean score was 3.2 with standard deviation of 2.5 in control group mean score was 4.9 with standard deviation of 2.1, and the independent t test value was 6.1.Day-III experimental group mean score was 1.8 with standard deviation of 1.5 in control group mean score was 2.9 with standard deviation of 1.5, and the independent t test value was 5.1 is greater than the table value of 1.69, at the level of$p \leq 0.05$.Hence Guided Imagery is effective method to reducing level of pain among patients who underwent abdominal surgeries.

SECTION-D

Association between the level of pain and their selected demographic variables among experimental and control group.

Table 4.7 Chi-square test on level of pain among patients in experimental and with their selected demographic variables.

n=60

S. No	Demographic variables	Experimental group pre test		Experimental group post test	
		df	**χ^2**	**Df**	**χ^2**
1.	Age	3	2.8	9	11.5
2.	Sex	2	0.2	3	2.4
3.	Education	8	5.3	12	15.3
4.	Occupation	8	11.8	3	1.7
5.	Family monthly income	6	6.4	6	3.8
6.	Area of residency	2	2.6	2	2.4
7.	Type of family	4	2.5	4	0.7
8.	Past surgical history	2	0.2	3	1.5
9.	Previous knowledge regarding guided imagery	2	**9.6***	3	2.1

***Significant p≤0.05**

The table 4.7 displays that in the experimental group there was a significant association found between the level of pain and the demographic variables such as previous knowledge regarding guided imagery. Hence, the hypothesis H_2 is accepted for previous knowledge regarding guided imagery rejected for the other variables in experimental group.

Summary

This chapter dealt with data analysis and interpretation in the form of statistical values based on objectives. The Paired‘t’ test was used to evaluate the effectiveness of guided imagery on pain among patients who underwent abdominal surgeries. The chi-square analysis was used to find out the association between the level of pain among patients who underwent abdominal surgeries and their selected demographic variables.

CHAPTER V

DISCUSSION

The studyfocused to evaluate the effectiveness of guided imagery on pain among patients who underwent abdominal surgeries at selected hospital, Coimbatore. This chapter presents the main findings and its discussion. This research study has been discussed based on the objectives and the following supported studies.

Baseline Characteristics of Experimental and Control Group

Demographic variables:

In Experimental group, 9 (30%) sample belongs to 41 to 50 years, 9(30%) sample belonged to 31to40 years, and 6 (20%) sample belonged to 20 to 30 years, and 5 (16.6) above 51 years.

In Control group, 10(33.3%) sample belonged to 31 to 40 years, 8 (26.6%) sample belonged to above 50 years, 6(20%) sample belonged to 20 to 30 years and 6(20%) of the samples belonged to 40 years.

In Experimental group, 18 (60%) of the samples were females and 12 (40%) of the samples were males.

In Control group, 17(56.7%) of the samples were females and 13 (43.3%) of the samples were males.

In Experimental group, 10 (33.3%) samples had secondary education, 7(23.4%) of the samples had primary education and 6(20%) had no formal education, 5(16.6%) samples had higher secondary education and least percentage 2(6.6%) of the sample were graduates.

In Control group, 9 (30%) samples had primary education, 6(20%) of the samples were higher secondary education, 6 (20%) of the samples had no formal education and 5(16.7%) of the samples were graduates and 4 (13.3%) had secondary education.

In Experimental group, 17 (56.7%) samples were private employees, whereas 13(43.3%) samples were government employees, none (0%) of the samples were unemployed, self-employed and coolies.

In Control group, 10 (33.3%) samples were self-employees, 8 (26.7%) samples were private employees, 6 (20%) samples were government employees, and 3 (10%) samples were unemployed, 3(10%) of the sample were coolies.

In Experimental group, 10(33.3%) of the samples were earning Rs 10001/-Rs 15000/-, 8 (26.7%)samples were earning monthly income of Rs 5001/-Rs 10000/-, 6 (20%) samples were earning below Rs 5000/- and 6(20%) were earning above Rs.15000/-.

In Control group 9 (30%) samples were earning monthly income of Rs 5001/-Rs10000/- whereas 8(26.7%) of the samples were earning below Rs 5000 and 7 (23.3%) samples were earning Rs10, 001-15,000 and 6(20%) samples were earning above Rs 15.000/.

In Experimental group, most of the samples 16 (53.4%) were from urban area and 14 (46.6%) samples were from rural area.

In Control group, 17 (56.7%) of the samples were from rural area and 13(43.3%) samples were from urban area.

In Experimental group, 14 (46.7%) of the samples belonged to joint family and 11(36.7%) sample belonged to extended family and 5(16.6%) of the samples belonged to nuclear family.

In Control group, half of the sample 15 (50%) belonged to joint family and 14(46.7%) sample belonged to nuclear family. However least percentage 1(3.3%) of the sample belonged to extended family.

In Experimental group, nearly 17 (56.7%) samples had past surgical history and only 13 (43.3%) samples had no past surgical history.

In Control group, 16 (53.3%) samples had no past surgical history and 14(46.7%) samples had past surgical history.

In Experimental group, most of the samples 21 (70%) did not have previous knowledge regarding guided imagery and 9(30%) of the samples had previous knowledge regarding guided imagery.

In Control group, majority of the samples 18(60%) did not have previous knowledge regarding guided imagery and 12 (40%) of the samples had previous knowledge regarding guided imagery.

Ogboli, Nwasor, SuleST,Yusufule (2012) studied the prescription pattern and common drugs used in the management of post- operative pain in adult patients who underwent surgery at Ahmadu Bello University Teaching Hospital, Nigeria. The sample size was 138 in the age group between 17 years and 18 years and the mean age was 41 years. The Verbal Rating Scale (VAS) was used to assess the level of

pain. The study result showed that 126 patients received intermittent intramuscular injections. In this, 61 patients received Pethidine, 53 patients received Pentazocine, 12 patients received Tramadol and 9 patients received non-steroidal Anti-Inflammatory Drugs. Oral Paracetmol was received by 6 (4.3%) patients and only 3(2.1%) patients did not receive any pain medications. This study revealed that moderate to severe pain is very common among 81 (58.7%) female patients than 42(29.7% males).

The first objective of the study was to assess the level of pain among patients who underwent abdominal surgeries

In pre-test experimental group Day-I 18(60%) of the samples had severe pain, 10(33.4%) of the samples had moderate pain, 2(6.6%) had worst pain, none (0%) of the samples had no pain and mild pain. Day –II 12(40%) of the samples had severe pain, 10(33.3%) of the samples had moderate pain, 7(23.3%) of the samples had mild pain, 1(3.3%) of sample had worst pain, none (0%) of the samples had no pain. Day –III 12(40%) of the samples had severe pain, 10 (33.4%) of the samples had moderate pain, 7(23.3%) of the samples had mild pain 1(3.3%) of the samples had worst pain and none(0%) of the samples had no pain.

In experimental group post-test Day-I 13(43.3%) of the samples had severe pain, 8(26.7%) of samples had mild pain, 8(26.7%) of the samples had moderate pain, 1(3.3%) of the samples had worst pain, none (0%) of the samples had no pain. Day –II 12 (40%) of the samples had mild pain, 8(26.7%) of the samples had severe pain, 7(23.3%) of the samples had moderate pain, 3(10%) of the samples had no pain, none (0%) of the samples had worst pain. Day –III 15(50%) of the samples had mild pain, 10(33.3%) of the samples had moderate pain, 5(16.7%) of the samples had no pain, none(0%) of the samples had severe pain and worst pain.

In control group pre-test Day-I 15(50%) of samples had moderate pain, 12(40%) had severe pain,3(10%) of the samples had worst pain, none of them had no pain and mild pain. Day II 14(46.7%) of samples had moderate pain, 11(36.7%) of samples had severe pain, 1(3.3%) of samples had worst pain, none (0%) of the samples had no pain. Day III 14(46.7%) of samples had moderate pain, 11(36.7%) of the samples had severe pain,4(13.3%)of the samples had mild pain, none (0%) of the samples had no pain.

In control group post-test Day-I 13 (43.3%) of the samples had moderate pain, 10 (33.3%) of samples had severe pain, 5 (16.7%) of the samples had mild pain, 2 (6.6%) of the samples had worst pain and none (0%) of the samples had no pain. Day –II 11 (36.7%) of the sample had moderate pain, 9 (30%) of the sample had severe pain, 9 (30%) of the samples had mild pain,1 (3.3%) of the samples had worst pain and none (0%) of the samples had no pain. Day –III 18 (60%) of the samples were moderate pain, 11 (36.7%) of the samples had mild pain, 1 (3.3%) of the samples had no pain and none of the samples had severe pain and worst pain

Chang, Chia Hui (2011)conducted a study on factors influencing abdominal surgical patients at their first postoperative ambulation in United States. The purpose of this study was to explore the factors, which influences the duration of the patients getting out of bed for those who underwent surgery. Based on the demography data, the patients who are younger, well-educated and female are more likely to experience shorter period of time to get out of the beds. However, after a surgery the patients whose bodies had inserted some tubes than those who had no tube inserted would be more likely to take increase in period of time to get out of the beds. Approximately, there were 50% of the participants with his/her first time to get out of bed after a surgery being encouraged by the health professionals and the barriers included fear of pain and wound split, 55.2%, 32.8% respectively. The discomforts experienced by the patients who were at the moment of the first time of getting out of the beds had pain, fainters and lower leg weakness, 67.2%, 58.6%, 34.5% respectively.

The second objective of the study was determine the effectiveness of guided imagery on level of pain among patient underwent abdominal surgeries

The Paired‘t’ test value which was calculated to analyse the effectiveness of guided imagery on patients who underwent abdominal surgeries to reduce the level of pain among experimental group. The calculated Paired‘t’ value Day -I was 4.5. Day -II was 4.41. Day -III was 7.7 significantly greater than the table value 1.69 at $p \leq 0.05$. Hence the hypothesis H_1 is accepted. It is evident that guided imagery was effective in reducing pain among patients who underwent abdominal surgeries in experimental group.

The independent‘t’ test value experimental group Day-I mean score was 4.7 with standard deviation of 2.7. In control group Day –I mean score was 6.6 with standard deviation of 2.2 independent t test value is 6.8. Day II experimental group mean score was 3.2 with standard deviation of 2.5 in control group mean score was 4.9 with standard deviation of 2.1, and the independent t test value was 6.1.Day-III experimental group mean score is 1.8 with standard deviation of 1.5 in control group mean score was 2.9 with standard deviation of 1.5, and the independent t test value is 5.1 was greater than the table value of 1.69, at the level of$p \leq 0.05$.Hence guided imagery is effective method to reducing level of among patients who underwent abdominal surgeries.

Myra Martz Hutha, Marion E Broomeb, Marion Good C(2008). In United States Conducted a study on guided imagery as a coping strategy for peri -operative patients and in this study, patients (elective colorectal patients) {n=130} were randomly assigned experimental and control group. The experimental group patients received guided imagery tape. Results showed that post operatively, median increase in the worst pain score was 72.5 for control group and 42.5 for imagery group ($p<0.0014$) and least pain was also significantly different ($p<0.001$) with a median increase of 30 for control and 12.5 for imagery group. The main purpose of the study was to identifying the effectiveness of imagery instruction & control of post-surgicalpain, a study was conducted with samples of 32 individual having elective surgery. They were allocated into control (procedural information only) group (n=16) and experimental group (n=16) who received procedural information and instruction regarding the use of pleasant imagery. Scores on visual analogue scale and recorded doses of analgesics administered post operatively provided measures of perceived pain and analgesic consumption the patient who received the imagery, significantly less post-surgical pain and consumed significantly less pain medication than did control group ($p<0.05$). These findings suggest that nurses can enhance the management of post-operative pain by teaching patients to use pleasant imagery.

The third objective of the study to find out the association between level of pain among patients who underwent abdominal surgeries and their selected demographic variables.

The experimental group there was a significant association found between the level of pain and the demographic variables such as previous knowledge regarding guided imagery. Hence, the hypothesis H_2 is accepted for previous knowledge regarding guided imagery rejected for the other variables in experimental group.

Summary

This chapter dealt with the discussion of the study with the reference to the objective and supportive studies. All the three objectives have been obtained and the three hypotheses were tested.

CHAPTER VI

SUMMARY, CONCLUSION, IMPLICATIONS ANDRECOMMENDATIONS

This chapter deals with the summary of the study and conclusions drawn. It also clarifies the implications for different areas like nursing practice, nursing education, nursing research, nursing administrations and recommendations for further research.

Summary of the Study

Guided imagery is defined as any of the various techniques as a series of verbal suggestions used to guide another person or oneself in imagining sensations and especially in visualizing an image in the mind to bring about a desired physical response as a reduction in stress and pain. Pain is one of the conditions purported to be improved by alternative therapies such as guided imagery.

The investigator conducted a study to evaluate the effectiveness of guided imagery on pain among patients who underwent abdominal surgeries in a selected hospital, Coimbatore.

The study was conducted in the in-patient department of Kongunad Hospital Pvt., Ltd, Coimbatore. Kongunad Hospital is a 250 bedded multi-speciality hospital with all infrastructure resources. The hospital receives an average of 200-210 patients every day. The average number of abdominal surgeries patients in the ward is about 3-4 patients per day. The research approach used in the study was quantitative evaluative approach. The quasi experimental study with pre-test post-test and control group design and non-probability purposive sampling technique was used for the present study. The sample size for this study was 60 patients(30 samples in experimental group; 30 samples in control group). Structured interview schedule was used to collect baseline data and numerical pain rating scale was used to measure the level of pain. The content validity was obtained prior to the study. Subsequently, a pilot study was conducted and was found that, the tool was feasible and practicable. A modified Ludwig Von Bertalanffy's General System Theory (1972) was formulated which provided a useful means in assessing the reduction of level of pain among patients who underwent abdominal surgeries after the implementation of Guided Imagery.

Findings of the study

The major findings of the study is summarized as below

- Among 60 samples in experimental group, 9 (30%) sample belongs to 41 to 50 years, 9(30%) sample belongs to 31to40 years, and 6 (20%) sample belongs to 20 to 30 years and 5 (16.6) above 51 years.
- In control group, 10(33.3%) sample belongs to 31 to 40 years, 8 (26.6%) sample belongs to above 50 years and 6(20%) sample belongs to 20 to 30 years and 6(20%) of the samples belongs to 40- years.
- In experimental group, 18 (60%) of the samples were females and 12 (40%) of the samples were males.
- In control group, 17(56.7%) of the samples were females and 13 (43.3%) of the samples were males.
- In experimental group, 10 (33.3%) samples had secondary education, 7(23.4%) of the samples had primary education and 6(20%) had no formal education, 5(16.6%) samples had higher secondary education and least percentage 2(6.6%) of the sample had graduates.
- In control group, 9 (30%) samples had primary education, 6(20%) of the samples were higher secondary education, 6 (20%) of the samples had no formal education and 5(16.7%) of the samples had graduated and 4 (13.3) secondary education respectively.
- In experimental group, 17 (56.7%) samples were private employees, whereas 13 (43.3%) samples were government employees and none (0%) of the samples was unemployed, self-employee or coolies.
- In control group, 10 (33.3%) samples were self-employed, 8 (26.7%) samples were private employees, 6 (20%) samples were government employees, 3 (10%) samples were unemployed and 3(10%) of the sample were coolie.
- In experimental group, 10(33.3%) of the sample were earning Rs 10001/-Rs 15000/ per month, 8 (26.7%) were earninga monthly income of Rs 5001/-Rs 10000/-,6 (20%) samples were earning below Rs 5000/-per month and 6(20%) earned above Rs.15000/- per month.

- In control group 9 (30%) samples were earning monthly income of Rs 5001/--Rs10000/-whereas 8(26.7%) of the samples were earning below Rs 5000/-, 7(23.3%) samples were earningRs10, 001-15,000/- and 6(20%) samples were earning above 15.000/-.
- In experimental group, half of the samples 16 (53.4%) were from urban area and 14 (46.6%) samples were from rural area.
- In control group, 17 (56.7%) of the samples were from rural area and 13(43.3%) samples were from urban area.
- In experimental group, 14 (46.7%) of the samples belonged to joint families and 11(36.7%) sample belonged to extended families. However, 5(16.6%) of the samples belonged to nuclear families.
- In control group, half of the sample 15 (50%) belonged to joint family and 14 (46.7%) sample belonged to nuclear family. However, least percentage 1(3.3%) of the sample belonged to extended family.
- In experimental group, nearly 17 (56.7%) had past surgical history and only 13 (43.3%) samples had no past surgical history. In control group, 16 (53.3%) samples had no past surgical history and 14(46.7%) of the samples had past surgical history.
- In experimental group, most of the samples 21 (70%) did not have previous knowledge regarding guided imagery and 9(30%) of the samples had previous knowledge regarding guided imagery.
- In control group, majority of the samples 18(60%) did not have previous knowledge regarding guided imagery and 12 (40%) of the samples had previous knowledge regarding guided imagery.

Conclusion

The study was done to evaluate the effectiveness of guided imagery on pain among patientswho underwent abdominal surgeries at selected hospital, Coimbatore. In experimental group pre-test, most of the samples had severe to moderate pain. In post-test, many samples had moderate to mild pain. In control group majority of the samples had severe pain in pre-test and post-test among patients who underwent abdominal surgeries. The result of the study revealed that, Guided imagery was effective method to reducing level of pain among patients who underwent abdominal surgeries.

Implications

The findings of the study have the following implications in the various areas of Nursing Service, Nursing Education, Nursing Administration and Nursing Research.

Nursing Practice:

- ✓ The nurse can understand the importance of Guided Imagery in nursing practice to reduce the level of pain among patients who underwent abdominal surgeries.
- ✓ The nurses can be provided with adequate exposure to the settings where Guided Imagery is effective in reducing level of pain among patients who underwent abdominal surgeries.
- ✓ The nursing personnel should be responsible to create awareness in the general public through mass media campaign regarding the importance of guided imagery as an alternative therapy for level of pain and prevent its complications.

Nursing Education:

- ❖ The nurse educator can include the concept of guided imagery to reduce the level of pain in nursing profession.
- ❖ Nursing curriculum needs to be updated to identify the aspects of nursing care that are lacking to provide supportive education to guided imagery.
- ❖ Emphasis could be given on alternative therapies in nursing curriculum.

Nursing Administration:

- ❖ Nurse administrators can arrange for usage of Guided Imagery method in clinical settings.
- ❖ Administrators can initiate health education by utilizing the staff preparing in usage of Guided Imagery to reduce pain among patients who underwent abdominal surgeries.
- ❖ Nurse advisors can organise formal training programme on usage of Guided Imagery and to reduce pain among patients who underwent abdominal surgeries.

Nursing Research:

- ➢ More researches can be done to establish effectiveness of guided imagery.
- ➢ Researchers can concentrate on guided imagery to reduce level of pain among patients who underwent abdominal surgeries.
- ➢ Disseminate the findings through conferences, seminar and publications in

professional, national and international journals.

- The generalization of study result can be made by further replication of the study.
- As per the study a nursing care guide can be developed for future references.

Recommendations

- A similar study can be conducted with larger group.
- A similar study can be conducted in various settings to identify the factors.
- A comparative study can be done to determine the effectiveness of guided imagery versus musical therapy.
- The same study can be conducted to find out the effectiveness of guided imagery on musculoskeletal surgeries.

Summary

This chapter dealt with summary, conclusion, implications for nursing practice and recommendation.

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ANNEXURE-A

LETTER SEEKING PERMISSION TO CONDUCT THE STUDY

From

Susan Petricia. B

Final Year M.Sc. (Nursing),

Kongunadu College Of Nursing,

Coimbatore.

To

The Managing Director,

Kongunad Hospital,

Coimbatore.

Respected Sir,

Subject: Letter seeking permission to conduct the study.

I, Susan Petricia B final year M.Sc(Nursing) Student of Kongunadu College of Nursing is conducting a research project in partial fulfilment of the Tamil Nadu Dr.M.G.R. Medical University, Chennai, as a part of the requirement for the award of M.Sc (Nursing) Degree.

TOPIC: "A Study to Evaluate the Effectiveness of guided imagery on pain among Patients who underwent abdominal surgeries in a Selected Hospital, Coimbatore."

I request you to kindly do the needful.

Thanking you,

Place: Coimbatore **Yoursfaithfully,**

Date: (Susan Petricia.B)

ANNEXURE-B

LETTER GRANTING PERMISSION TO CONDUCT THE STUDY

From

The Managing Director,

Kongunad Hospital,

Coimbatore.

To

Ms.Susan Petricia. B

Final Year M.Sc. (N),

Kongunadu College Of Nursing,

Coimbatore.

This is to certify that Ms. Susan Petricia B, final year M.Sc(Nursing) Student of Kongunadu College of Nursing is conducting a research project in partial fulfilment of the Tamil Nadu Dr. M.G.R. Medical University, Chennai, as a part of the requirement for the award of M.Sc (Nursing) Degree.

TOPIC: "A Study to Evaluate the Effectiveness of guided imagery on pain among Patients underwent abdominal surgeries in a Selected Hospital at Coimbatore."

I grant permission for her to conduct the study in Kongunad Hospital.

Permitted

Place: Coimbatore

Date:

Dr. P. RAJU, M.S.,
Managing Director
Regd. No : 26678
Kongunad Hospital (P) Limited
116,117, 11th Street, Tatabad,
Coimbatore - 641 012.

ANNEXURE-C

LETTER REQUESTING OPINION AND SUGGESTIONS OF EXPERT FOR CONTENT VALIDATION OF THE RESEARCH TOOL

From

Susan Petricia.B

Final Year M.Sc(N)

Kongunadu College of Nursing

Coimbatore, Tamil Nadu.

To

Respected Madam/Sir,

Subject: Requesting opinion and suggestions of experts for establishing content validity of the tool.

I, **Susan Petricia B,** final year M.Sc.(Nursing) student of Kongunadu College of Nursing, Coimbatore, have selected the below mentioned statement of the problem for the research study to be submitted to The Tamil Nadu Dr.M.G.R. Medical University, Chennai as partial fulfilment for the award of Master of Science in Nursing.

Topic: "A Study to Evaluate the Effectiveness of guided imagery on pain among Patients who underwent abdominal surgeries in a Selected Hospital at Coimbatore."

I request you to kindly validate the tools & content developed for the study and give your expert opinion and suggestions for necessary modifications.

Thanking you

Place: Coimbatore

Yours Sincerely

(Susan Petricia.B)

Date:

Enclosed:

1) Certificate of validation
2) Criteria checklist for evaluation of tool
3) Tool for collection of data

ANNEXURE- D

LIST OF EXPERTS FOR VALIDATION

1. **Dr. R. Karthikeyan, M.S,**
   General Surgeon,

   Kongunad Hospitals Pvt. Ltd,

   Coimbatore

2. **Mrs Kanchana, M.Sc(N),**
   HOD, Medical Surgical Nursing,

   Sri Ramakrishna Institute of Paramedical Sciences,

   Coimbatore.

3. **Prof.P. Kuzhanthaivel, M.Sc (N),**
   Medical Surgical Nursing Department,

   KMCH College of Nursing,

   Coimbatore.

4. **Mrs . Uma Mahaswari, M.Sc (N),**
   Associate Professor,

   Medical Surgical Nursing Department,

   PPG College of Nursing,

   Coimbatore.

5. **Mrs S. Balamani, M.Sc (N),**
   Associate Professor,

   Medical Surgical Nursing Department,

   Annaimeenakshi College of Nursing,

   Coimbatore.

ANNEXURE-E

CERTIFICATE OF VALIDATION

This is to certify that the tool and content developed by **Ms.Susanpetricia B**, final year M.Sc. Nursing student of Kongunadu College Of Nursing, Coimbatore (affiliated to The Tamil Nadu Dr. M.G.R. Medical University) is validated and can proceed with this tool and content for the main study entitled "**A STUDY TO EVALUATE THE EFFECTIVENESS OF GUIDED IMAGERY ON PAIN AMONG PATIENTS WHO UNDERWENT ABDOMINAL SURGERIES IN A SELECTED HOSPITAL, AT COIMBATORE."**

Signature of the Validator

Name :
Designation :
Date :

Dr. R. KARTHIKEYAN M.B.B.S.,M.S (General Surgery)
Reg. No : 86537
Consultant Surgeon / Medical Director
KONGUNAD HOSPITALS (P) LTD.
No : 116,117, 11th Street, Tatabad
COIMBATORE - 641 012

CERTIFICATE OF VALIDATION

This is to certify that the tool and content developed by **Ms.Susanpetricia B**, final year M.Sc. Nursing student of Kongunadu College Of Nursing, Coimbatore (affiliated to The Tamil Nadu Dr. M.G.R. Medical University) is validated and can proceed with this tool and content for the main study entitled "**A STUDY TO EVALUATE THE EFFECTIVENESS OF GUIDED IMAGERY ON PAIN AMONG PATIENTS WHO UNDERWENT ABDOMINAL SURGERIES IN A SELECTED HOSPITAL, AT COIMBATORE**."

Signature of the Validator

Name: KANEHANA·K.

Designation: Asso. PROFESSOR.

Date: 28.1.16.

CERTIFICATE OF VALIDATION

This is to certify that the tool and content developed by **Ms.Susanpetricia B**, final year M.Sc. Nursing student of Kongunadu College Of Nursing, Coimbatore (affiliated to The Tamil Nadu Dr. M.G.R. Medical University) is validated and can proceed with this tool and content for the main study entitled "**A STUDY TO EVALUATE THE EFFECTIVENESS OF GUIDED IMAGERY ON PAIN AMONG PATIENTS WHO UNDERWENT ABDOMINAL SURGERIES IN A SELECTED HOSPITAL, AT COIMBATORE**."

P. Kuzhanthaivel

Signature of the Validator

Name: P. KUZHANTHAIVEL
Designation: PROFESSOR
Date: 12/01/2016

CERTIFICATE OF VALIDATION

This is to certify that the tool and content developed by **Ms.Susanpetricia.B**, final year M.Sc. Nursing student of Kongunadu College Of Nursing, Coimbatore (affiliated to The Tamil Nadu Dr. M.G.R. Medical University) is validated and can proceed with this tool and content for the main study entitled "**A STUDY TO EVALUATE THE EFFECTIVENESS OF GUIDED IMAGERY ON PAIN AMONG PATIENTS WHO UNDERWENT ABDOMINAL SURGERIES IN A SELECTED HOSPITAL, AT COIMBATORE**."

P.P.G. COLLEGE OF NURSING COIMBATORE-35

Signature of the Validator

Name: R. UMAMAHESWARI

Designation: PROFESSOR

Date: 21.1.2016

CERTIFICATE OF VALIDATION

This is to certify that the tool and content developed by **Ms.Susanpetricia B**, final year M.Sc. Nursing student of Kongunadu College Of Nursing, Coimbatore (affiliated to The Tamil Nadu Dr. M.G.R. Medical University) is validated and can proceed with this tool and content for the main study entitled "**A STUDY TO EVALUATE THE EFFECTIVENESS OF GUIDED IMAGERY ON PAIN AMONG PATIENTS WHO UNDERWENT ABDOMINAL SURGERIES IN A SELECTED HOSPITAL, AT COIMBATORE**."

ANNAI MEENAKSHI COLLEGE OF NURSING C.E. & C.T. CBE-21.

28/01/2016.

Signature of the Validator :

Name: Ms. Balamani. S.

Designation: Asso. Prof.

Date: 28/01/2016.

CERTIFICATE OF EDITING

TO WHOMSOEVER IT MAY CONCERN

Certify that the dissertation paper titled **"A study to evaluate the effectiveness of guided imagery on pain among patients who underwent abdominal surgeries in a selected hospital, at Coimbatore"** by Miss. Susan petricia.B. It has been checked for accuracy and correctness of Tamil language used in presenting the paper is lucid, unambiguous, free of grammatical or spelling errors and apt for the purpose.

K. Kaleeswaran

Signature with Date

HEADMASTER
Corporation Higher Secondary School
Rathinapuri, Coimbatore - 641 027.

TOOL FOR DATA COLLECTION

DEMOGRAPHC VARIABLE

1) Age in years

1.1) 20-30

1.2) 31-40

1.3) 40-50

1.4) 50-60

2) Sex

2.1) Male

2.2) Female

3) Education

3.1) No formal education

3.2) Primary education

3.3) Secondary education

3.4) Higher secondary

3.5) Graduation

4) Occupation

4.1) Unemployed

4.2) Self employed

4.3) Employed in private sector

4.4) Employed in Government Sector

4.5) Coolie

5) Monthly income family

5.1) Below 5,000 Rupees

5.2) 5,001-10,000 Rupees

5.3) 10,001-15,000 Rupees

5.4) Above 15,000 Rupees

6) Area of residency

6.1) Urban area

6.2) Rural area

7) Type of family

7.1) Joint family

7.2) Nuclear family

7.3) Extended family

8) Past surgical history

8.1)Yes

8.2)No

9) If yes specify.....

10) Previous knowledge regarding guided imagery

10.1) Yes

10.2) No

வரையறுக்கப்பட்ட நேர்காணல் அட்டவணை

இந்தபகுதிதனிநபர் பற்றிவிபரங்களைக் கொண்டுள்ளது. தங்களைப் பற்றியசரியானவிபரங்களைதெரிவிக்கவேண்டுகிறேன். தங்களைப் பற்றியவிபரங்களைபத்திரமாகபாதுகாக்கப்படும்.

அறுவைசிகிச்சைக்குபிந்தையநோயாளிகளுக்கான சமூக மற்றும் குடும்பநலக் காரணிகள்.

1. வயது

1.1) 20-30

1.2) 31-40

1.3) 41-50

2. பாலினம்

2.1) ஆண்

2.2) பெண்

3. கல்வித் தகுதி

3.1) படிக்காதவர்

3.2) ஆரம்பக் கல்வி

3.3) உயர்நிலைக் கல்வி

3.4) மேல்நிலைக் கல்வி

3.5) பட்டதாரி

4. வேலை

4.1) வேலையில்லாதவர்

4.2) சுயத் தொழில்

4.3) தனியார் தொழில்

4.4) அரசாங்கதொழில்

4.5) கூலிதொழில்

5. மாதவருமானம் (ரூபாயில்)

5.1) ரூ. 5,000-குறைவாக

5.2) ரூ.5,001-ரூ 10,000 வரை

5.3) ரூ.10,001-ரூ.15,000 வரை

5.4) ரூ.15,000 மேல்

6. வசிக்குமிடம்

6.1) நகரம்

6.2) கிராமம்

7. குடும்பமுறை

7.1) கூட்டுக் குடும்பம்

7.2) தனிக் குடும்பம்

7.3) விரிவாக்கப்பட்டக் குடும்பம்

8. இதற்குமுன் அறுவைசிகிச்சைஏதேனும் செய்யப்பட்டுள்ளதா?

8.1) ஆம்

8.2) இல்லை

9. ஆம் எனில் எவ்வகைஅறுவைசிகிச்சை

10. வழிகாட்டும் கற்பனையைபற்றியமுந்தையஅறிவு உள்ளதா?

10.1) ஆம்

10.2) இல்லை

GUIDED IMAGERY

INTRODUCTION

In 1970 used guided imagery used todescribed the experience of the carl and stephine as they treated for cancer pain . The term guided imagery denotes the technique used in the second (voluntary) instance by which images are recalled from long term or short term memory, or created from fantasy, or a combination of both, in response to guidance, instruction, or supervision. Guided imagery is therefore the assisted stimulation or re-creation of perceptual experience across sensory modalities.

BENIFITS

- Improving clarity in life
- Spiritual development
- Experiencing elation, freedom and expanded awareness
- Emotional and physical healing
- Enhancing creativity
- profoundly deep relaxation
- Increasing confidence and personal empowerment
- Opening the heart and healing relationships
- Curing negativity or self-defeating behaviours
- Improving performance in business or sports
- Resolving psychological difficulties

PROCEDURE

Begin by finding a comfortable position sitting or lying down. Allow your body to begin to relax as you start to create a picture in your mind. Let the forest visualization begin.

Imagine yourself walking on a path through a forest. The path is soft beneath your shoes, a mixture of soil, fallen leaves, pine needles, and moss. As you walk, your body relaxes and your mind clears, more and more with each step you take.

Breathe in the fresh mountain air, filling your lungs completely. Now exhale. Breathe out all the air. Feeling refreshed.

Take another deep breath in...revitalizing.... and breathe out completely, letting your body relax further.

Continue to breathe slowly and deeply as you walk through the forest and continue the forest visualization.

The air is cool, but comfortable. Sun filters through the trees, making a moving dappled pattern on the ground before you.

Listen to the sounds of the forest.... Birds singing.A gentle breeze blowing.The leaves on the trees shift and sway in the soft wind.

Your body relaxes more and more as you walk. Count your steps and breathe in unison with your strides. Breathe in 2, 3, 4... hold 2, 3...exhale 2, 3, 4, 5.

Breathe in 2, 3, 4... hold 2, 3...exhale 2, 3, 4, 5.

Breathe in 2, 3, 4... hold 2, 3...exhale 2, 3, 4, 5.

Continue to breathe like this, slowly and deeply, as you become more and more relaxed.

As you walk through the forest visualization, feel your muscles relaxing and lengthening. As your arms swing in rhythm with your walking, they become loose, relaxed, and limp.

Feel your back relaxing as your spine lengthens and the muscles relax. Feel the tension leaving your body as you admire the scenery around you.

Your legs and lower body relax as well, feeling free and relaxed.

As you continue to walk through the forest visualization, you begin to climb up a slight incline. You easily tread along smooth rocks on the path. Feeling at one with nature.

The breeze continues to blow through the treetops, but you are sheltered on the path, and the air around you is calm.

Small saplings grow at the sides of the path.

Around you is an immense array of greens. Some of the leaves on the trees are a delicate, light green. Some leaves are deep, dark, true forest green.

Many trees have needles that look very soft and very green. The forest floor is thick, green moss.

Tall trees grow on either side of the path. Picture the variety of trees around you. Some have smooth, white bark. Others are darker, with coarse, heavy bark, deeply grooved. Enjoy the colors of the bark on the trees - white, tan, brown, red, black...

many combinations of color. You admire the rough, brown bark of pine trees and enjoy the fresh pine scent.

Smell the forest around you. The air is fresh, and filled with the scent of trees, soil, and mountain streams.

Continue the forest visualization...

You can hear the sound of water faintly in the distance. The gentle burbling sound of a creek.

As you continue to walk through the forest, you are gaining elevation and getting closer to the sound of a running stream.

Continue to enjoy the forest around you. Enjoy the forest visualization.

As you near the top of the mountain, you hear the stream, very close now. The path curves up ahead. You can see sunlight streaming onto the path.

As you round the corner, you hear the water, and see a clearing in the trees up ahead. A beautiful lookout point awaits.

You are growing tired from your journey. Your body feels pleasantly tired and heavy.

Imagine yourself walking toward the clearing and the stream. Stepping stones make an easy path across the stream and toward the edge of the mountain. Step on each large flat stone to easily cross the small, shallow stream.

Up ahead is a large, smooth rock... like a chair waiting for you to rest. The rock is placed perfectly, high up on this beautiful vantage point.

Sit or lie down on the rock if you wish. It is very comfortable. You feel very comfortable and at ease. The sun shines down on you.

Looking around, you see mountains in the distance. Faint and blue.

You can look down from your vantage point into a valley with trees and a brilliant blue lake. Across from you is another mountain.

The clearing around you is made up of rocks, soil, pine needles, moss, and grass. The grass and mountain wildflowers around you blow gently in the breeze. A deer quietly emerges from the edge of the forest to graze in the clearing. As the deer raises its head to look at you, you can see its nostrils moving to catch your scent. The deer cautiously walks to the stream to drink before disappearing back into the forest.

Squirrels dart in and out of sight as they romp through the trees, and race across the clearing.

Feel the sun warming your body as you relax on the rock. Enjoy the majestic landscape around you and feel your body relaxing even more.

Continue to breathe the clean, fresh air.You feel so relaxed.Calm.In unity with nature around you. Enjoy the sights....sounds....and smells of the forest around you.Feel the sun, warm on your skin. Feel the gentle breeze blow across your cheek. Listen to the birds singing.

Hear the stream flowing. The leaves rustling in the breeze.Squirrels chattering. See the flowers, trees, valley, and mountains around you. Lay back on the comfortable rock and you can look up to see the blue sky. Small white clouds float gently across the sky. Watch them drift slowly by. Shapes ever changing.Enjoy this peaceful place.

CONCLUSION

Guided imagery is form of focused relaxation that helps to treat harmony between mind and body. Through this guided imagery patient free from pain and anxiety. And also strengthen the immune system and enhance your ability to heal. So the guided imagery is a powerful technique to improve the quality of life.

க□பனைர் ல் வ□காட்டல்

முனனுரை:

க□பனைர் ல் வ□காட்டல் 1970ஆரி ஆண்டு காரல் ம□றுரி ஸ்டெ□ணி எணிவரால் □□றுநோர் னால் ஏ□படுரி வ□ர் ணி□லிச்சை□காக பயணிடுமீதள்பட்டது. க□பனைர் ல் வ□காட்டல் எணிதுபுண்டகால, ம□றுரி குறுலியகால□னை□களைதுாண்டுவதணிமூலமாகவோஅல்லதுக□பனைர் ல் கொண்டுசெல்வதணிமூலமாகவோஅல்லது இரண்டுரி கலகிதுவ□காட்டி, பர் □□ய□ மீது உட□ல் வருரி எல்லா□ தமானவ□ களு□குரி □ங்கு□ □லிறது. இகித க□பனைர் ல் வ□காட்டல் □கிதனைகளை மா□ற□ரி, □லணிஉணஞ்□களைதுாண்ட□ரி பயணிடுமீதள்படுலிறது.

பயணகிம் :

- ❖ □ரச்சனைகளால் வருரி மனஅழுமீதமீதைகுறை□லிறது.
- ❖ கு□□கோளைஅடையஉத□லிறது (எ.கா) எடைகுறைமீதல், □கை □டிமீதலை த□ ஞ்மீதல் ம□றுரி வ□ யைகட்டுள்படுமீதஉத□லிறது
- ❖ மன குழள்பமீ□□ருகிது தெ□ வடையஉத□லிறது
- ❖ கட□ம் நரி□□கையை அ□க□□லிறது க□பனைர் ல் வ□காட்டல் மூலரி, மனஎழுச்□ ம□றுரி பரவசரி ம□றும□ □ள்□ணஞ்□ஏ□படுலிறது.
- ❖ மனரி ம□றுரி உடல் சரிபகிதமான □ரச்சனைகளைமீ □ஞ்□லிறது.
- ❖ □துமையானஎண்ணத்களைஉருவா□குலிறது
- ❖ அமை□யான மன□லையைஉருவா□குலிறது
- ❖ தணினரி□□கை ம□றுரி சுய ம□பாதையைஉயஞ்மீதுலிறது
- ❖ எ□ஞ்றையான எண்ணத்களைஅக□றுலிறது
- ❖ தொ□ல் ம□றுரி □ளையாட்டுக□ ல் முணனே□றமீதைதருலிறது
- ❖ மனக□டத்களு□கு□ங்வைதருலிறது.

செ□முறை:

க□பனைர் ல் வ□காட்டல் எணிது அடஞ்திகாடுஅழகானமலைகம், ம□றுரி புஞ்□லைகம் வ□யாகவ□நடமீதுதல் ஆகுரி.

முதல்படி: முத□ல்மன□□கு இதமான சூ□□லையை ஏ□படுமீத□ரி அதாவது உட்காருதல் அல்லது படுமீதல் □ணிமுதுகு தண்டுவடமீதை நேராகவைமீது உடலைலேசாகமா□□ஒரு க□பனை உருவமீதை முணி□ லைள்படுமீதுவோரி அதுஒரு அடஞ்தி காடு.

ஒருஅழகானகாட்டு பகு□ர் ல் நடகிதுசெல்லிறோரி. அகித பகு□ □க□ரி மெணிமையான மண் □றைகிதபாதை.அகிதபகு□ இலைசருகுகம், □ல்வெ□கம் □ல்வெ□யைதழு□லிணி ப□ து□கம் □றைகிதவை. அகித பகு□ர் ல் நடகிதுசெல்லுரி போது உடல் □க□ரி லேசாக□ரி, மன அமை□ □றைகிததாக□ரி காணள்படுலிறது.

அகிதகாடுக□ ல் உம்ள மகை□ ல் இருகிது வருரி கு□ ஞ்□யான கா□றை சுவா□□குரி போதுதுா□மையான இதமானகா□றுரை□ரல் வ□யாகஉட□ணி அனைமீதுபாகத்களு□குரி

பர□வதைஉணஞ்ிறோரி.

இள்ீபோதுமெதுவாகமூச்சுக்காற்றைஉள்ளிழுத்துகாற்றைமெதுவாகவெளியேற்றவும்.

மீண்டும் ஒருமுறைநன்றாக மூச்சுகாற்றைஉள்ளிழுத்துமெதுவாகவெளியேற்றவும் இப்போது உடல் லேசாக இருள்பதைஉணஞ்ி□ஞ்கும் .

மீண்டும் ஒருமுறை மூச்சுக்காற்றைஉள்ளிழுத்து பின் மெதுவாகவெளியேற்றி அப்படியேஅந்த அடர்ந்த காட்டு பகு□யை முணி□றுமீதுவோரி.

கு□ ஞ்ித காரு, அமை□யான சூழல், எ□ல் கொன்சுரி அழகு, அகித மரமீ□ணிஇடையேதோணிறுரி சூ□யஒ□ ம□றுரி வ□யெத்குரி □□ய, □□ய பறவைக□ ணிசமீதரி உத்கம் செ□ களை□ரி, இமைகளை□ரி இ□ மையா□குலிறது.

கா□றுசுமகிதுவருரி இ□ ய இசை□ரி, மலஞ்□ ணிவாசைன□ரி □ச்□க□ ணிநித்காரரி ம□றுரி □□கிது செல்லுரி மேக□கூட்டத்களுரி உத்களை மலி□ச்□யடைய செ□லிறது.

பூண்டுரி மெதுவாககா□றைஉம்□ ழுமீது1,2,3வரைஎண்ணி மூச்சை பிடித்து வைக்கவும் பின் மெதுவாகமூச்சுக்காற்றைவெளியேற்றி 1,2,3,4 என மூச்சைபிடித்து வைக்கவும்.

மீண்டும் மூச்சுக்காற்றைஉள்ளிழுத்து1,2,3 எனஎண்களைஎண்வீ □கொண்ட2,3 வரை மூச்சை அட□லி பின் மூச்சுக்காற்றைவெளியேற்றி அதேநிலையில் 1,2,3,4,5 வரைஎண்ண□ரி.

இதேபோல் பூண்டுரி செ□துஅகித அடஞ்ித காட்டு பகு□ வ□யாகநடகிதுசெல்வதைபோல் உணருவோரி. இள்ீபோதுநமது கை, கால், உடல் அனைமீதுரி இலேசாக இருள்பதைஉணரமுடி□ரி. புத்கம் நடகிதுசெல்லுரி பாதைர் ல் அழகானமலைகம் ம□றுரி தூ□மையானகா□று சூழகி□ருள்பதை உணரமுடி□ரி.புத்கம் நடகிதுசெல்லுரி போதுகைகம் அசைகிதாடிஉடல் இலகுவாலி இரு□குரி. காடுக□ல் நடகிதுமலை உச்□யை அடைலிறோரி. சு□□லுரி அழகானமரத்கம் ம□றுரி பாறைக□ல் இருகிது மெல்□யஓசை□ட்னவருரி புஞ்□□ச்□ நரிமைமெ□மர□கச்செ□லிறது.

முடி□ரை:

கற்கனையில் வழிகாட்டல் ஒரு அமைதியான சூழ்நிலையை உருவாக்கும் நோக்கமாகும். இதன் மூலம் மன□□குரி, உட□□குரி ஒருநல்லதொடஞ்பைஏ□படுமீதுலிறது. க□பனைர் ல் வ□காட்டல் நோயா□ கம் மட்டுமல்லஅனைவரும் பயன்படுத்தலாம். இதன் மூலம் நோயாளிகள் வலிமற்றும் பயத்திலிருந்தும் □டுபடலாரி. மேலுரி உடலு□குவ□மையை□ரி, நோ□ எ□ஞ்□ தணிமையை□ரி தருலிறது. எனவேகற்பனையில் வழிகாட்டல் ஒரு சக்தி வாய்ந்தசெய்முறை ஆகும். இதன் மூலம் வாழ்க்கை தரம் உயஞ்ீதள்படுலிறது.